Palomar Mountain Road History

Peter Brueggeman 2026

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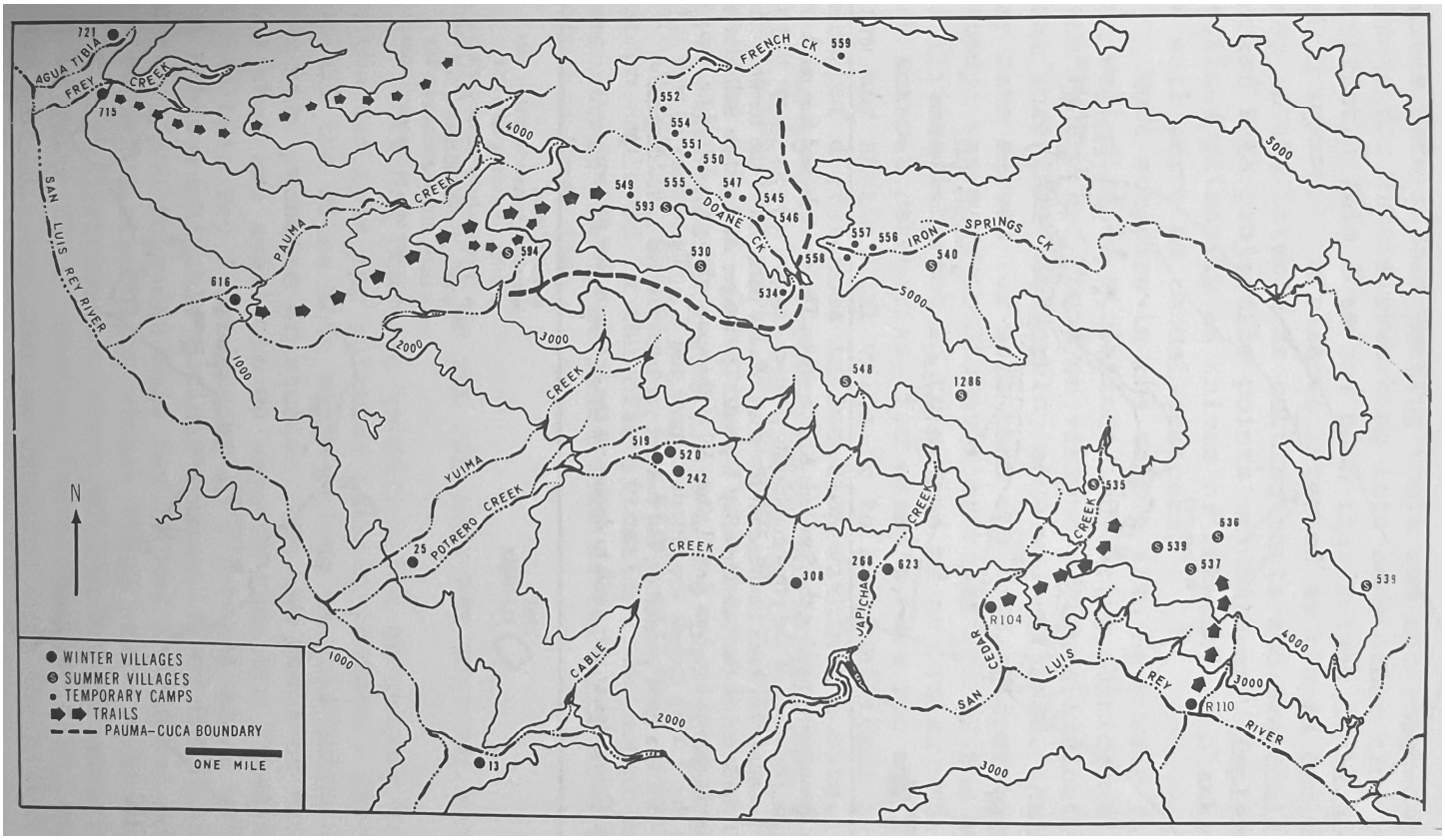
First there were trails …

Before there were roads up Palomar Mountain there were trails.



Arrows mark the known Indian trails up the <u>south</u> and <u>west</u> sides of Palomar Mountain

Figure caption: Map indicates location of major sites in middle San Luis Rey River drainage. This includes both summer and winter villages, and the trails connecting them where these are known [22].

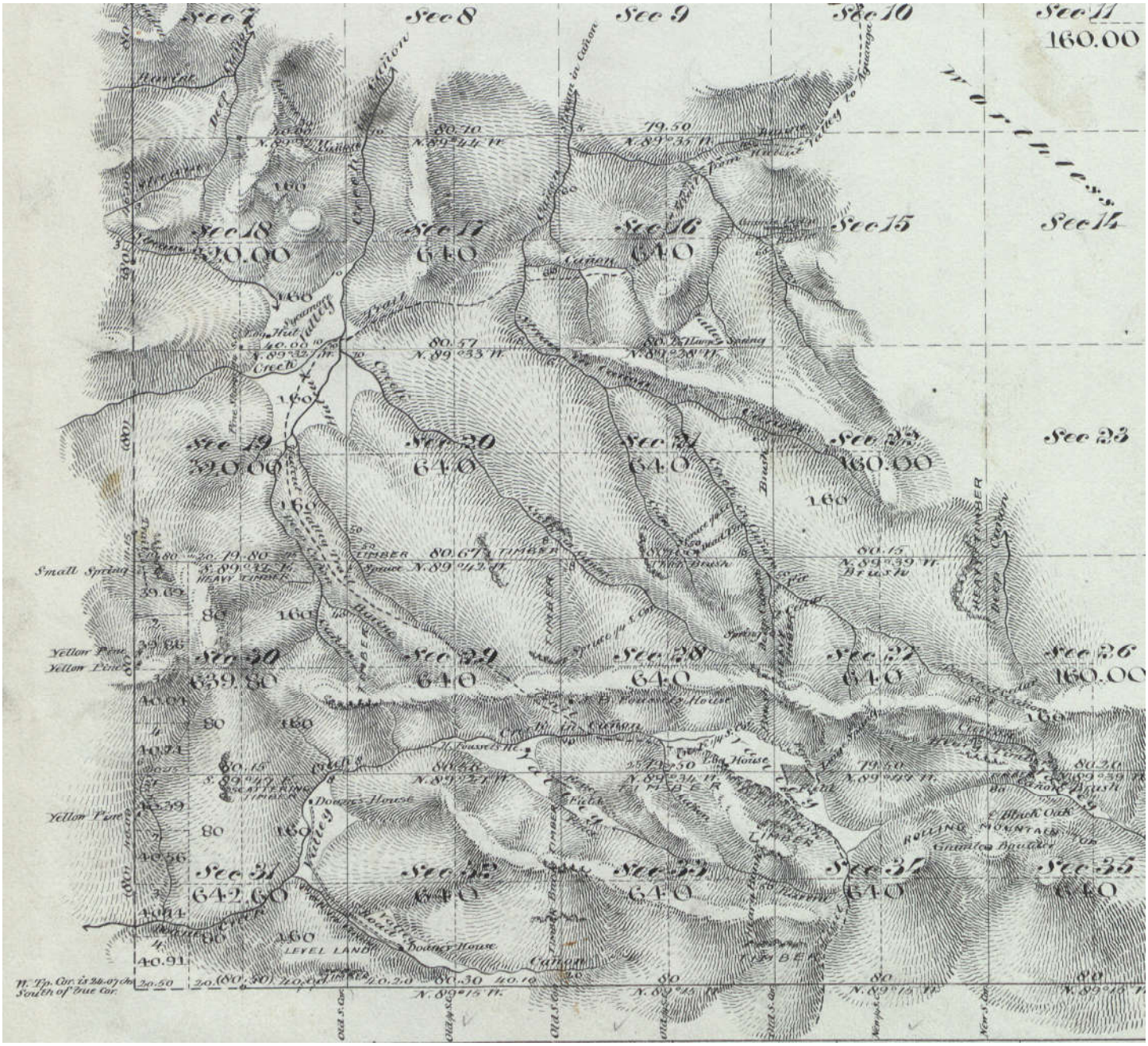
Trujillo Trail on the south side of Palomar Mountain
Beasley's 1890 Official Map of San Diego County California [27]

Beasley's map shows the southern Trujillo Trail ascending Palomar Mountain, starting near Jose M. Trujillo's house in Cuca. Palomar Mountain was known as Smith Mountain for several years after the murder of Joseph Smith in 1868.

On June 17, 1876, an anonymous San Diego Union article entitled "A Visit to Smith's Mountain" described ascending Palomar Mountain via the southern Trujillo Trail and descending on a western trail to Pauma [24]:

> After a good night's rest, we mounted our horses and set out to ascend Smith's Mountain. It is no small task, an ascent of 4,000 feet in three miles. There are several routes and we chose the nearest one, which Major Utt mildly told us was *rather* rough. And it was rather rough, if not *more* so. Very little of the way could we ride, but walking, climbing, scrambling over sand, rocks and brush, leading our panting horses, under a broiling sun, the thermometer over 100 degrees; no shade, no breeze and no water, we toiled

for four or five hours. Our “heavy weight” (over 200 pounds) panted and perspired; but good lungs, strong muscles and a determined will, kept him even with the “light weights.” One of the most annoying things is that horses can’t climb slowly like men, but make a series of short rushes, keeping a man’s nerves in a constant state of tension for fear of being trampled on. However all things have an end, and at least we reached the summit and could not find any water, which we needed very much. For a mile or two we rode over ridges and through valleys covered with pine, spruce and cedar, but all dry. At last a big gray squirrel, with his bushy tail gracefully curled, ran across, and we knew there must be water near, for squirrels never travel in the heat of the day unless to or from the water. Searching up a little valley, we soon found a small spring of clear ice-cold water, breaking out of a bank and sinking again. We quenched our thirst, made a little pool and watered our horses, then unsaddling them, rested half an hour in the shade. … [the author goes on to describe visiting several Palomar Mountain residents.]



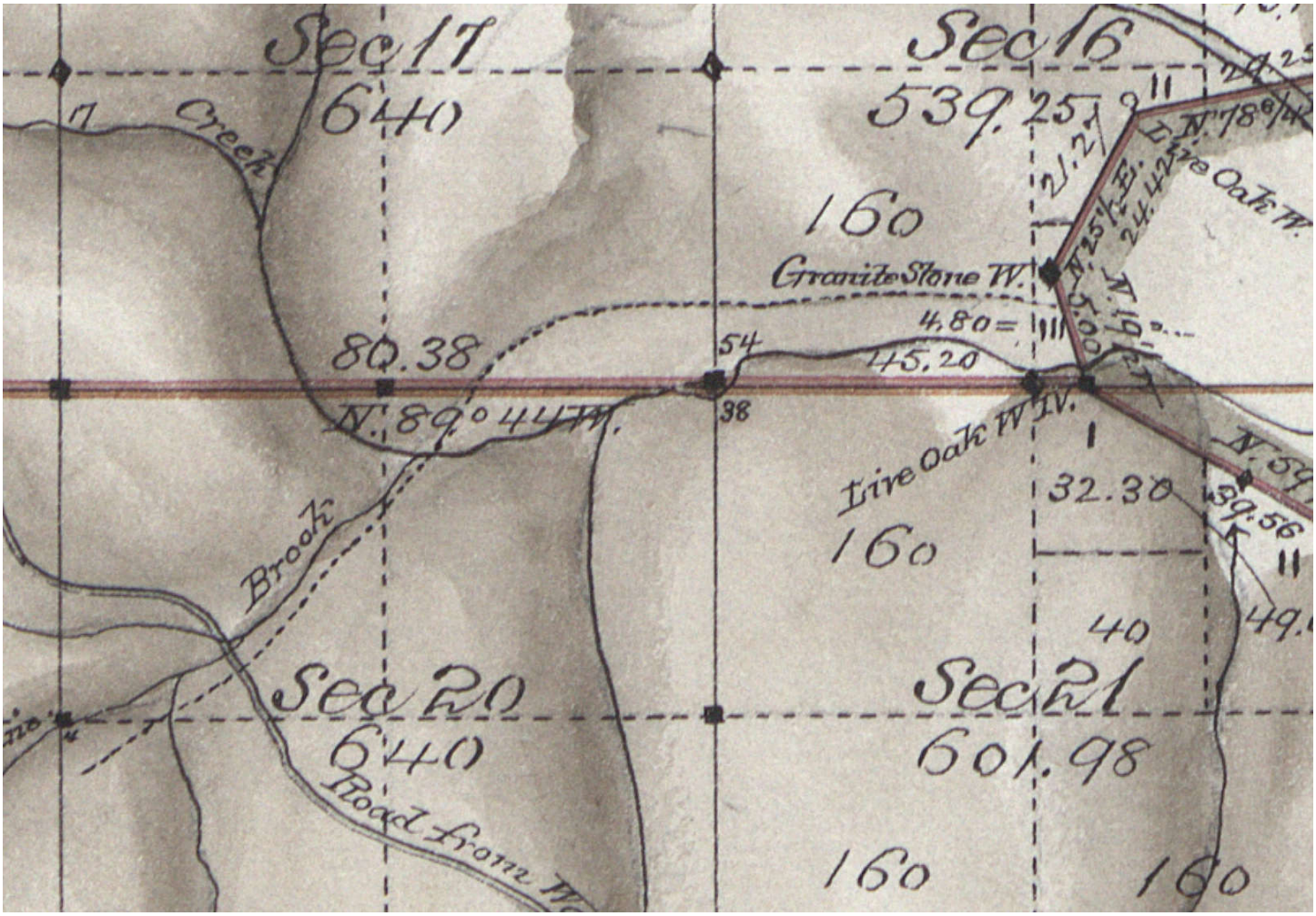
1884 Palomar Mountain survey map [26]

On this 1884 survey map, the southern Trujillo trail enters Palomar Mountain (at middle bottom) after which a trail passes through French Valley going by the houses of Hubert Alberto Foussat (1845–1933) and Jean Baptiste Foussat (1847–1896) and then heads northward through Hutcut Valley to Aguanga. A road in Doane Valley passes between George Doane's lower and upper houses. George Doane's mother Nancy Doane moved into that upper Doane house in 1887 or earlier.

That same 1876 anonymous article "A Visit to Smith's Mountain" described descending of Palomar Mountain by trail on its western side [24]:

> [the author describes visiting several Palomar settlers.] … We came down by a road built by the Indians, which they use with their *carritas* or two-

wheeled carts for bringing down the acorns they gather in the Fall. It is very steep most of the way, sometimes 30 feet to the 100; but much easier than where we went up. The Pauma creek contains trout, the only stream probably in the county. About noon we reached the foot of the mountain …



1880 Palomar Mountain survey map [25]

On this 1880 survey map, a dotted-line trail to Dyche Valley on Palomar Mountain starts from the West Branch of the San Luis Rey River.

Then there were roads …

Joseph Smith (1817-1868) was living in San Diego and in 1859 moved onto the east side of Palomar Mountain onto a ranch he co-owned with Ephraim W. Morse, cultivating about 100 acres of land, and keeping about 3,000 sheep and 100 head of cattle [20,21].

Catharine Wood writes [1]:

> The first road on Palomar was over the east end, the one broken through by Joseph Smith. It was noted for its steep "slides" of something like 30 per cent grade. Heavy flat-bottomed shoes of iron were tied to wheels of the clumsy ox carts then in use, when descending these steep pitches. The shoes acted as brakes by causing the wheels to slide instead of turn.

Drag shoes of iron were slipped under a wheel or wheels and then the wagon wheels were locked so that the wheels did not turn. The wagon then slid downhill.

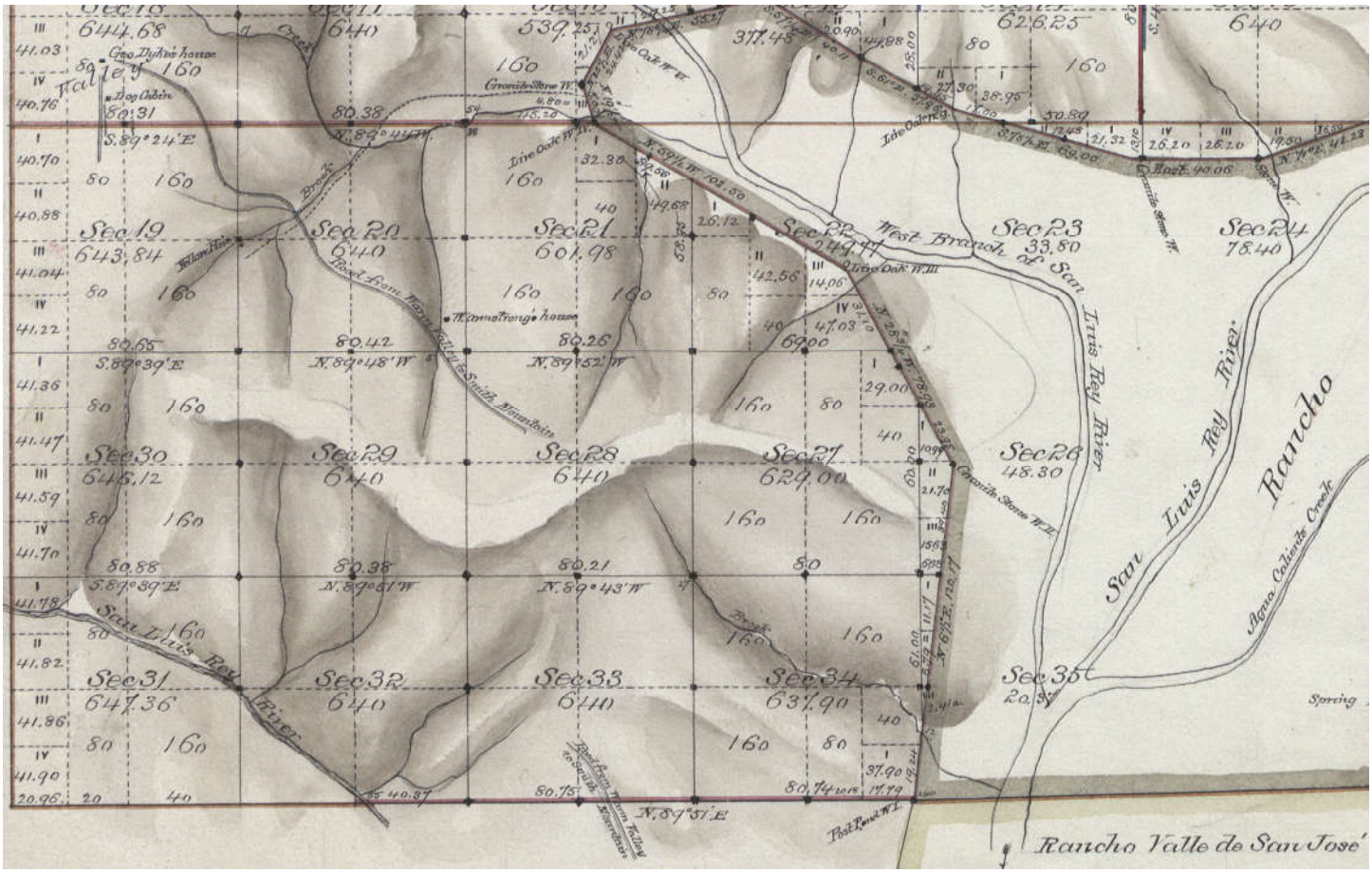
The east road down Palomar Mountain was called a slide trail due to its steep sections.

French Percheron horses were imported in great numbers to America, being used by farmers and teamsters as draft horses. Winbert C. Fink, who lived on Palomar Mountain, said this about Joseph Smith's East Grade road [2]:

> (Joseph Smith) … who had some good Percheron draft horses, broke a trail through the brush up the east end of the mountain from Warner Ranch; as he followed the backbone of the ridge to avoid turns and to pull four horses to the wagon to get any amount of the supplies he needed at all times. This trail was called the slide and all of the pioneers on Smith Mountain went up this route all walking up the steep pull.

In later 1873, a runaway accident going down the East Grade partially paralyzed Joseph Divilbiss. In 1896, the San Diego Union reported [29]:

> Died. – At Wynola, Nov. 22, 1896, Joseph Divilbiss, aged 61 years. Mr. Divilbiss was one of the pioneers of San Diego, having come here about thirty-five years ago. He was a man of sterling integrity and considerable education, and was at one time chairman of the board of supervisors of this county. About twenty-three years ago his team ran away down the Smith mountain grade, throwing him out and injuring him so severely as to cause partial paralysis. In this almost helpless condition, suffering at times untold agony, he has passed the remainder of his life. For about twenty years he made his home with the family of Mrs. A. Reed of Wynola, where he has received care and kindness for which he was very grateful.



1880 Palomar Mountain survey map [25]

On this 1880 survey map, the upper and lower East Grade roads are labelled “Road from Warm Valley to Smith Mountain.” The houses of George Dyche and William Armstrong are shown.

At the January 7, 1885, meeting of the San Diego County Board of Supervisors, a new road district for Palomar Mountain was declared which encompassed the East Grade [204]:

> The petition of A. McQueen and others for the formation of a new road district having been read and it appearing that said petition having been signed by a competent number of tax payers, on motion the territory comprised in Smith Mountain voting precinct is hereby declared a new road district to be known as Smith Mountain road district and it is further ordered that Wm. Cook be and is hereby appointed as overseer of said road district. The territory so described is taken from the Agua Caliente Road District.

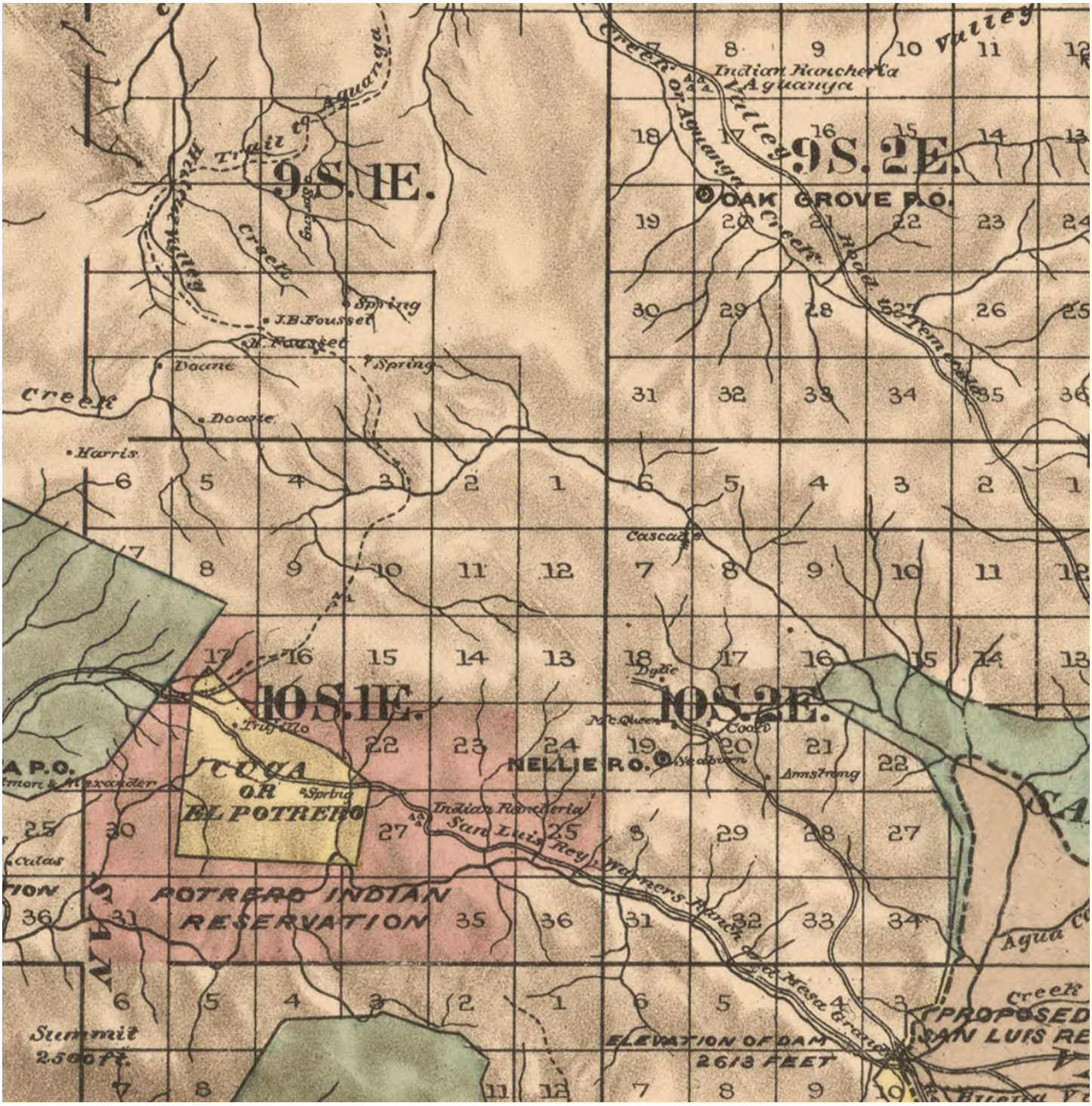
On August 20, 1885, the National City Record published a San Diego County camping travelogue including travel up and down the East Grade [205]:

> WEDNESDAY, 29. -- From Warner's ranch we traveled through the valley and arrived at the foot of Smith's mountain about 8 o'clock, where we all, except the driver, got out and walked – the grade was the worst we had met with. The Atkinson grade is quite level compared with this, although the road-bed is much better. …
>
> THURSDAY, 30. – In coming down the mountain this morning the method adopted was, to cut a small oak tree and tie it to the back of the wagon, with two of our party on the tree, and with our wagon-brake, we managed to get down the mountain much easier than we got up. …

Theodore O. Bailey settled on Palomar Mountain in 1887 [82]. Edward Davis writes about Theodore Bailey moving his family and belongings up the East Grade onto Palomar Mountain [80]:

> It must be borne in mind that the roads were steep, rocky and narrow and filled with ruts. We had two "slide grades," one descending from Mesa Grande to the border of Warner Ranch, and if a wagon did not have good brakes, it was just too bad. The other was coming off Palomar Mountain to the present Henshaw Dam, and in order to make a safe descent it was necessary to lock the brakes and drag a tree behind. Freight rates from San Diego to Mesa Grande were one dollar per hundred pounds, and it took three days to make the trip. Ordinary travel was on horseback, and every rancher had a forge and anvil and did his own shoeing of horses, and had one or more good cow ponies in the corral. …
>
> The old road up Palomar led up a ridge on the east side and was almost as steep as a one-third pitch roof and was known as a slide. It took six horses to haul a small load, so lacking any freight teams, Bailey packed most of his primitive equipment on old "Gray," who was a member in good standing

and a valuable addition to the Bailey household. Old Gray came from the Yuma Indians, who in a playful mood while the iron was hot, branded him all over except his eyes and ears with three dots in a row. This faithful horse packed nearly everything, from frying pans to the kitchen stove, and from rocking chairs to bureaus, over thirty miles of steep roads rising three thousand feet from the foot of the mountain. The one luxury, the Bailey piano, had to be shipped to San Diego and Mesa Grande from the East, and it was a supreme achievement and a happy moment when the old square piano was hauled up the steep slopes of Palomar by a six-horse team, without tipping over, after two days, it landed on the whip-sawed floor of the mountain home. … The elder Mendenhall watched all these proceedings with a wary, suspicious eye, so when he heard of the ancient piano being hauled up the old slide grade, he could contain himself no longer and relieved his pent-up feelings as follows: “There’s old Psalm singin’ Bailey, gone and hauled a pianner all the way up Smith Mountain.” When all was ready, Mrs. Bailey and the family filled the old spring wagon and found a new home all ready to receive them.



Palomar Mountain area from Beasley's 1890 Official Map of San Diego County California [27]

Beasley's 1890 map shows the East Grade Road going by the houses of William Armstrong, Ambrose & Eliza Seburn, George Washington Cook, Angus & Nellie McQueen, and George Dyche. Map shows the southern Trujillo Trail going up Palomar starting near Jose M. Trujillo's house in Cuca and then up on Palomar, passing through French Valley with sheep raisers Hubert Alberto Foussat (1845–1933) and Jean Baptiste Foussat (1847–1896), and onto Aguanga. Map shows the houses of George Doane and Nate Harrison (Harris) at middle left; there was no western road up Palomar Mountain at this time.

In a letter dated June 24, 1890, George Doane's mother Nancy Doane writes to her son Cheyney describing the descent of the southern Trujillo Trail [55]:

> ... We left home on the 5th of May and had to be in Los Angeles on the 7th so we had no time to go round by the road but went down the slide trail into Green Valley. Before we began the descent the men cut a large brushey limb and tied it to the buggy on going down the steepest places. One of the men would stand on the bush and so prevent the carriage from running on to the horses, we were a little over an hour going down when to go the other way would have taken greater part of two days. …

Winbert C. Fink, who lived on Palomar Mountain, said [2]:

> Many years later the county made a road up the south side. This was called Trujillo Road and was very steep. ….

On August 13, 1890, the San Diego Union reported on the Trujillo Road [145]:

> Yesterday the Board of Supervisors granted the petition of Roy Johnson for a public highway in the Smith Mountain Road District, and appointed Henry Langrehr, Theodore Bailey and George W. Cook as viewers of the road.

On September 2, 1890, the San Diego Union reported on the Trujillo Road [147]:

> NEW COUNTY ROADS
>
> Surveys made for the San Marcos and Potrero Roads
>
> County Surveyor Henry C. Langrehr, P.H. McConville and William A. Clark have returned from an extended survey for the county. They located and surveyed a county road from Carlsbad in an eastern direction to San Marcos through the Hedionda Rancho into the old Freemont military road. … After the above survey was completed, the party proceeded to the much needed county road from the base of Rancho Potrero to the summit of Palomar mountain, which is on the south slope of said mountain.

All within

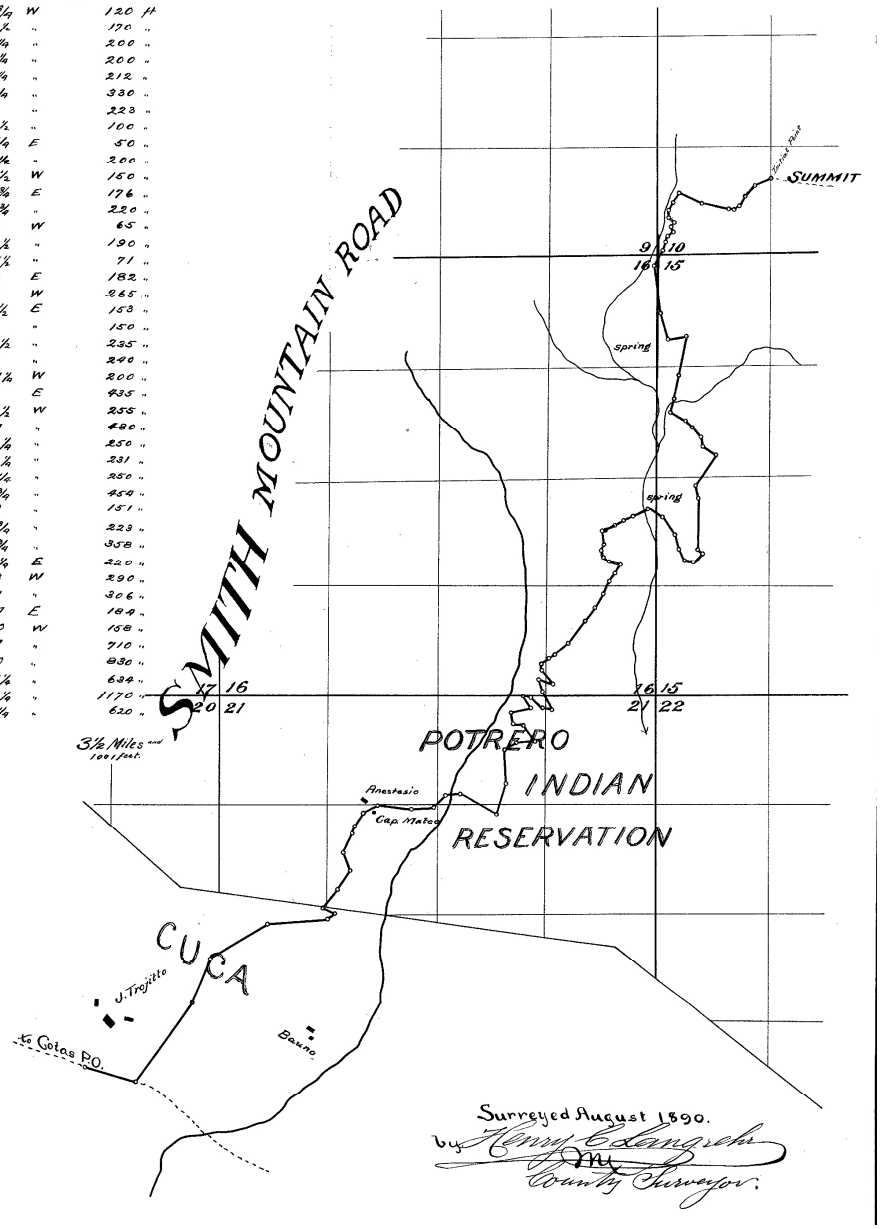
T10S-R1E

20 ft road

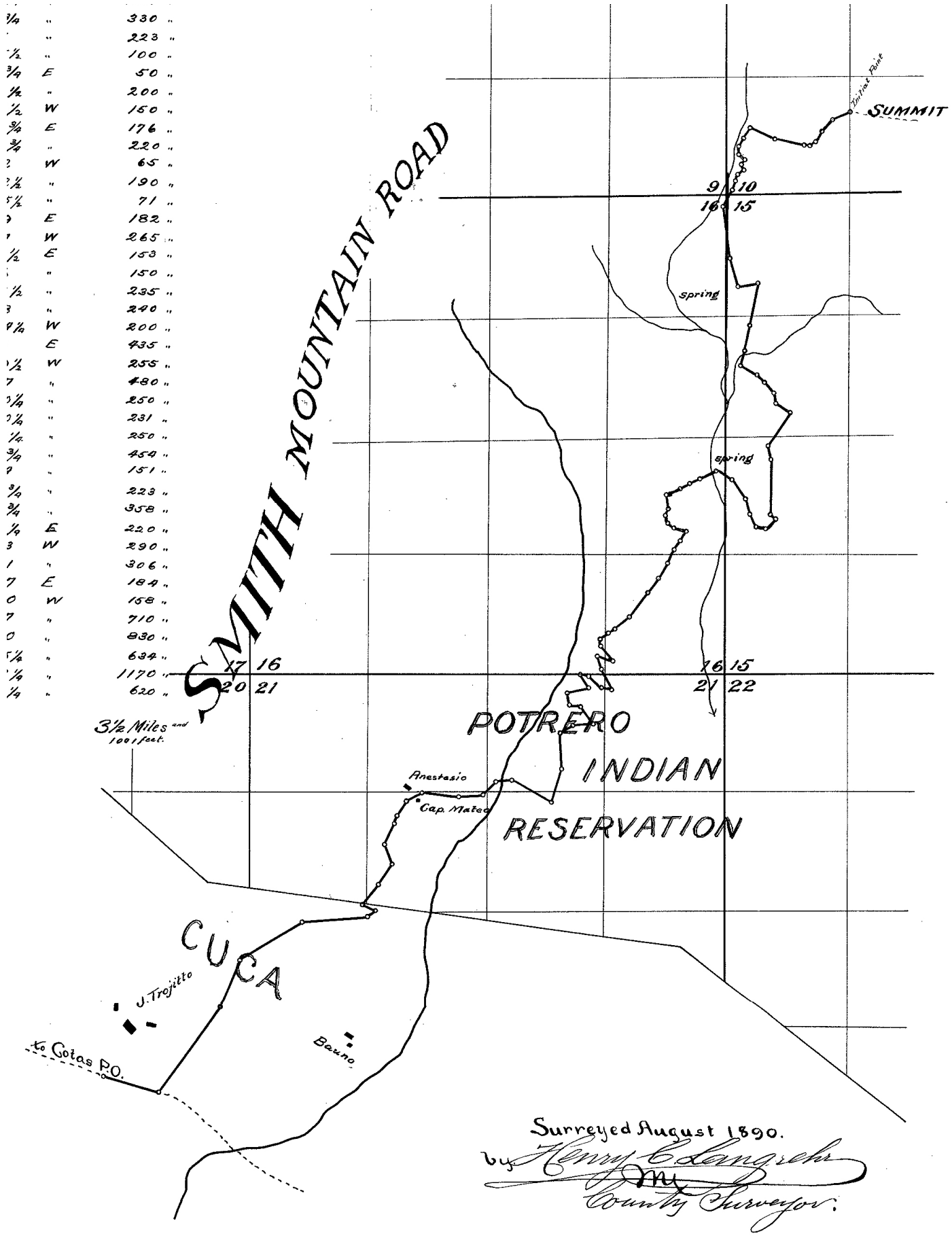
Station	Course	Distance	Station	Course	Distance
1	S 64½ W	208 ft.	51 to 52	S 42¾ W	120 ft
2	" 40¾ "	153 "	53	" 45¼ "	170 "
3	" 34 "	124 "	54	" 26¼ "	200 "
4	" 69¼ "	79 "	55	" 21¾ "	200 "
5	N 89 "	70 "	56	" 32¼ "	212 "
6	" 74 "	300 "	57	" 31¾ "	330 "
7	" 88 "	42 "	58	" 55 "	223 "
8	" 67½ "	57 "	59	" 45½ "	100 "
9	" 62¾ "	174 "	60	" 11¾ E	50 "
10	S 22¾ "	159 "	61	" 28¼ "	200 "
11	" 7¼ "	132 "	62	N 63½ W	150 "
12	" 3 "	65 "	63	S 19¾ E	176 "
13	" 35¾ E	61 "	64	" 16¾ "	220 "
14	" 2¼ W	40 "	65	N 62 W	65 "
15	" 24 "	37 "	66	" 62½ "	190 "
16	" 38 "	88 "	67	" 75½ "	71 "
17	" 31¼ "	56 "	68	S 29 E	182 "
18	" 25¾ "	119 "	69	" 77 W	265 "
19	" 18½ "	172 "	70	" 31½ E	153 "
20	" 4¾ E	675 "	71	" 86 "	150 "
21	" 48¾ "	250 "	72	" 72½ "	235 "
22	N 79 "	200 "	73	" 28 "	240 "
23	S 7 W	531 "	74	" 44¼ W	200 "
24	" 11 "	427 "	75	" 3 E	435 "
25	" 61¼ E	182 "	76	" 19½ W	255 "
26	" 50¾ "	88 "	77	N 37 "	480 "
27	" 41¾ "	50 "	78	S 80¼ "	250 "
28	" 46¼ "	60 "	79	" 40¼ "	231 "
29	" 45¾ "	68 "	80	" 86½ "	250 "
30	" 30 "	100 "	81	N 83¾ "	454 "
31	" 46½ "	200 "	82	S 69 "	151 "
32	" 35¾ W	450 "	83	" 17¾ "	223 "
33	" 20¾ "	183 "	84	" 15¾ "	358 "
34	" 1¼ "	650 "	85	" 12½ E	220 "
35	" 43¼ E	67 "	86	" 43 W	290 "
36	" 35½ W	71 "	87	" 41 "	306 "
37	" 39¾ "	78 "	88	" 77 E	184 "
38	N 65½ "	76 "	89	" 50 W	158 "
39	" 29¾ "	105 "	90	" 87 "	710 "
40	" 61 "	190 "	91	" 60 "	830 "
41	" 36¼ "	316 "	92	" 15¼ "	634 "
42	" 58½ "	223 "	93	" 38¼ "	1170 "
43	S 64½ "	202 "	94	N 71¼ "	620 "
44	" 72½ "	102 "	95		
45	" 64¾ "	100 "			
46	" 62½ "	160 "			
47	" 3¾ "	165 "			
48	" 20 "	100 "			
49	" 20 E	68 "			
50	" 35½ "	71 "			
51	" 63½ "	121 "			

Entered in "Abstracts of Road Petitions" Folio 253

Nelson



Henry C. Langrehr's August 1890 survey of a southern road route up Palomar Mountain from Cuca, the Trujillo Road [3]



Closer view of Langrehr's Trujillo Road route survey [3]

The San Diego County Board of Supervisors transferred funds to a road overseer to pay for work on the Trujillo Road; the road overseer was George Washington Cook in 1890 through 1892 [146].

On September 18, 1890, the Escondido Times published an anonymous letter to the editor about the newly surveyed Trujillo Road, which was probably written by Clark Cleaver [4]:

> Palomar Mountain.
>
> EDITORS TIMES: At last and in great part through your effective help, and the kind consideration of the county dads in ordering a survey, we have got a grade staked out. And through the winding and winning ways of Henry Langrehr, the county surveyor, the grade is only about seven feet to the hundred. In length it will be about five miles. The actual distance in a straight line would be about one mile. The tumble, the actual descent to the Cuca valley, something like 1500 feet. The first two miles of the grade from the summit down is an easy affair. I think the settlers on and in the vicinity of the mountain can build that themselves. The next two miles there will be some grading, but not a great deal of heavy rock work. Then one mile, completing it, is almost perfect as it is, being a gently sloping plain.
>
> And this road, which should not cost over $3,000, will open to settlement and improvement a township of the very best fruit land in San Diego county. These mountain lands are perfectly adapted to such fruits as apples, pears, cherries, plums, etc., and especially to all kinds of berries. We also raise as good corn as is produced anywhere, with potatoes and cabbage galor. There is also a large amount of timber, such as cedar, fir and pine, for building material, fruit boxes, etc. – perhaps sixty million feet –and for hardwood we have the Valparaiso oak as it is called here, in any quantity.
>
> A little assistance given to this gem of the uplands would develop it into a prosperous community. Land which is now worth from $1.25 to $5 per acre would go up to $50. Land that will produce fall apples such as the Rambo or Wagner which keep until the following June, and Ben Davis and Northern Spy, till apples come again, is sure to be wanted when it comes to be known.
>
> Our altitude is from 4,500 to 5,700 feet. The lands on the side of the mountain are generally steep, rugged and sometimes rocky, but on top we have rolling hills of fine rich soil and grassy valleys. But the rolling hills are the best fruit lands, as they are not frosty, while the valleys are liable to frost in May and again in October.
>
> Sept. 7, 1890. PALOMAR

Clark Cleaver, 4 July 1904
Robert Asher photograph, collection of Peter Brueggeman

On June 8, 1891, the San Diego Union reported on the Trujillo Road [6]:

> When the road now being graded on Palomar mountain shall be completed, Mr. Cleaver proposes to erect a sawmill on his 500 acres of pine, cedar, hemlock, oak and beech trees. The Escondido Times says that then will follow new houses and a hotel.

On July 30, 1891, the Escondido Times reported on the Trujillo Road [7]:

> Clark Cleaver was down from Palomar Mountain Tuesday, getting supplies for the benefit of the new grade now being constructed down this side. He says that about one and a half miles of the grade is nearly completed, but there still remains fully as much heavy work. They are now organizing large volunteer forces and expect, with assistance promised from the county, to rapidly push the construction to completion.

On August 27, 1891, the San Diego Union newspaper reported on the Trujillo Road [8]:

> A fine, well-graded road is being built up the slopes of Smith mountain, to take the place of the old winding cattle trail which was positively dangerous and nearly impassable. It will prove a boon to the farmers of Smith mountain.

At its meeting of September 10, 1891, the president of the San Diego County Board of Supervisors signed a road contract with Clark Cleaver to construct a road up the south side of Palomar Mountain, the Trujillo Road; the San Diego Union reported the next day [5]:

> In the matter of a contract with C. Cleaver of Smith mountain for the construction of a road on Smith mountain, the following contract was signed by the president of the board:
>
> Whereas the board of supervisors of said county have recently declared the road hereinafter mentioned to be a public highway, and have ordered that the same be opened to the public as a highway, and whereas it is necessary that for the more convenient use of said highway the same should be constructed and graded, as hereinafter mentioned, now, for the mutual consideration herein appearing, it is agreed as follows:
>
> The contractor shall, with all reasonable expedition, and in any case by the 30th day of November, 1891, construct, level and grade a good and convenient road at least eight feet wide along the line of said highway, in the county of San Diego, state of California, commencing at the end of the county road at or near the residence of Jose Trujillo, on section 21, township south, range 1 east, S.B.M., and running thence in a northeasterly direction over the lands of Jose Trujillo, being the northeast quarter of section 21 aforesaid, thence running over the Indian reservation to government land on section 15, in said township, thence through land of W.J. Morrison, being the south half of the northwest quarter and the north half of the southwest quarter of said section 15; thence through land of Thomas D. Mendenhall to the summit of Smith mountain in said county.
>
> The road shall be constructed in accordance with the survey made in August 1890, by the county surveyor.
>
> The contractor shall furnish at his own proper cost and expense all tools, labor and materials necessary and required in the construction of said road.
>
> The contractor shall in the construction of the road comply with all the requirements and directions of J.P.M. Rainbow, supervisor of said county, and road commissioner of the district in which the highway lies.

> The county shall pay for the work hereinbefore contracted to be done provided the same shall be well and faithfully done by November 30, 1891. The sum of $1,000 to be paid upon completion of the work and upon presentation of a claim therefore to the board of supervisors in the manner provided by law.
>
> Signed by J.S. Buck, chairman, and C. Cleaver, contractor.

On October 4, 1891, the San Diego Union reported on the Trujillo Road [144]:

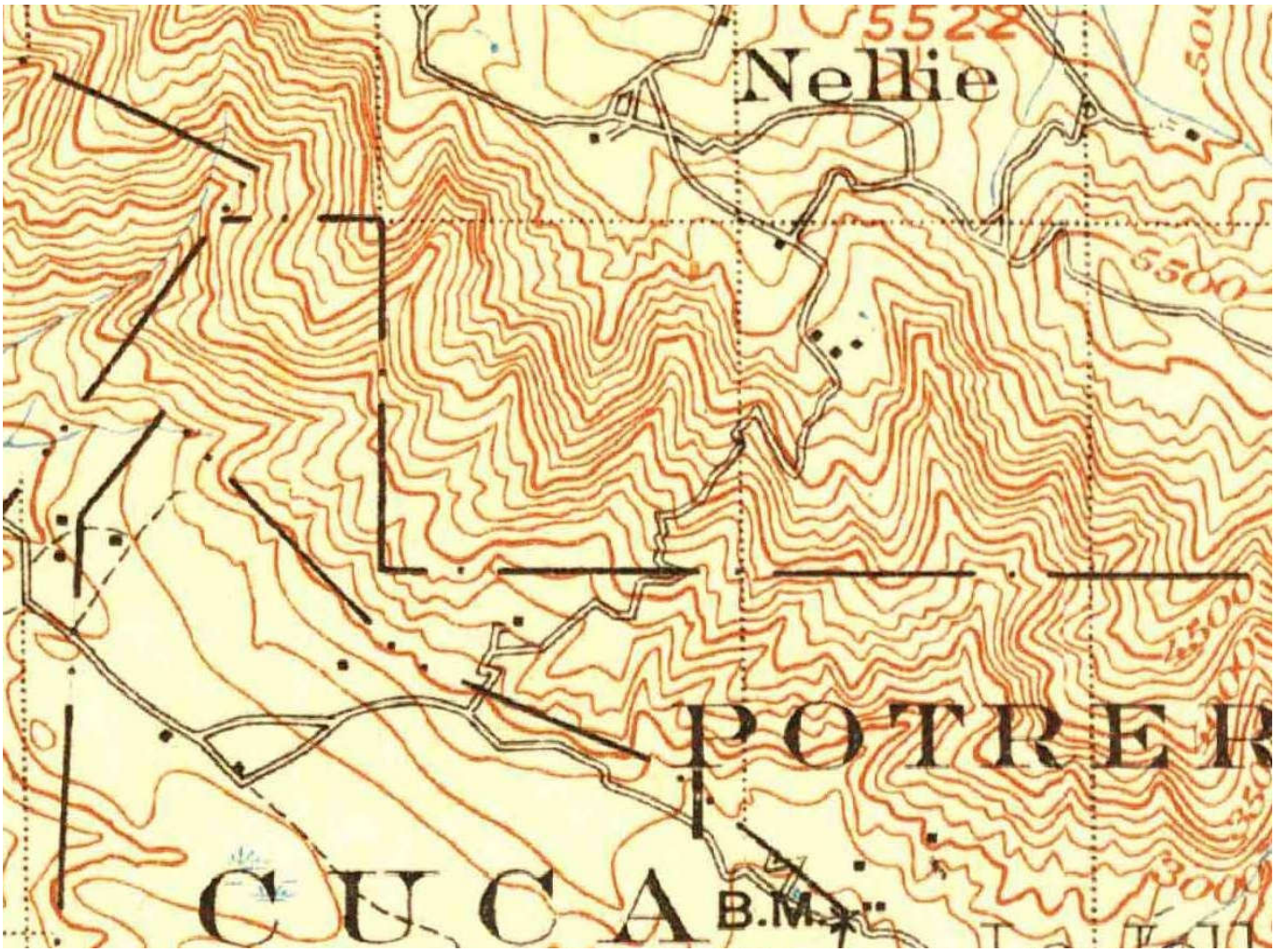
> There are several quite extensive and costly pieces of roadwork now in progress in the county. The Smith Mountain road is one of these, to which the county has contributed quite largely, the people of that district paying the balance in cash or work. This road will certainly "fill a long-felt want" if ever a road did. Heretofore the only highway open or available to the ranchers of that fertile and prosperous section has been a cattle trail, to travel which in a vehicle of any sort has been dangerous. It is said that the new road is a very good piece of inexpensive and practical mountain-road building.

The San Diego Union reported that the County Board of Supervisors funded the Trujillo Road at its meeting on January 5, 1892 [9]:

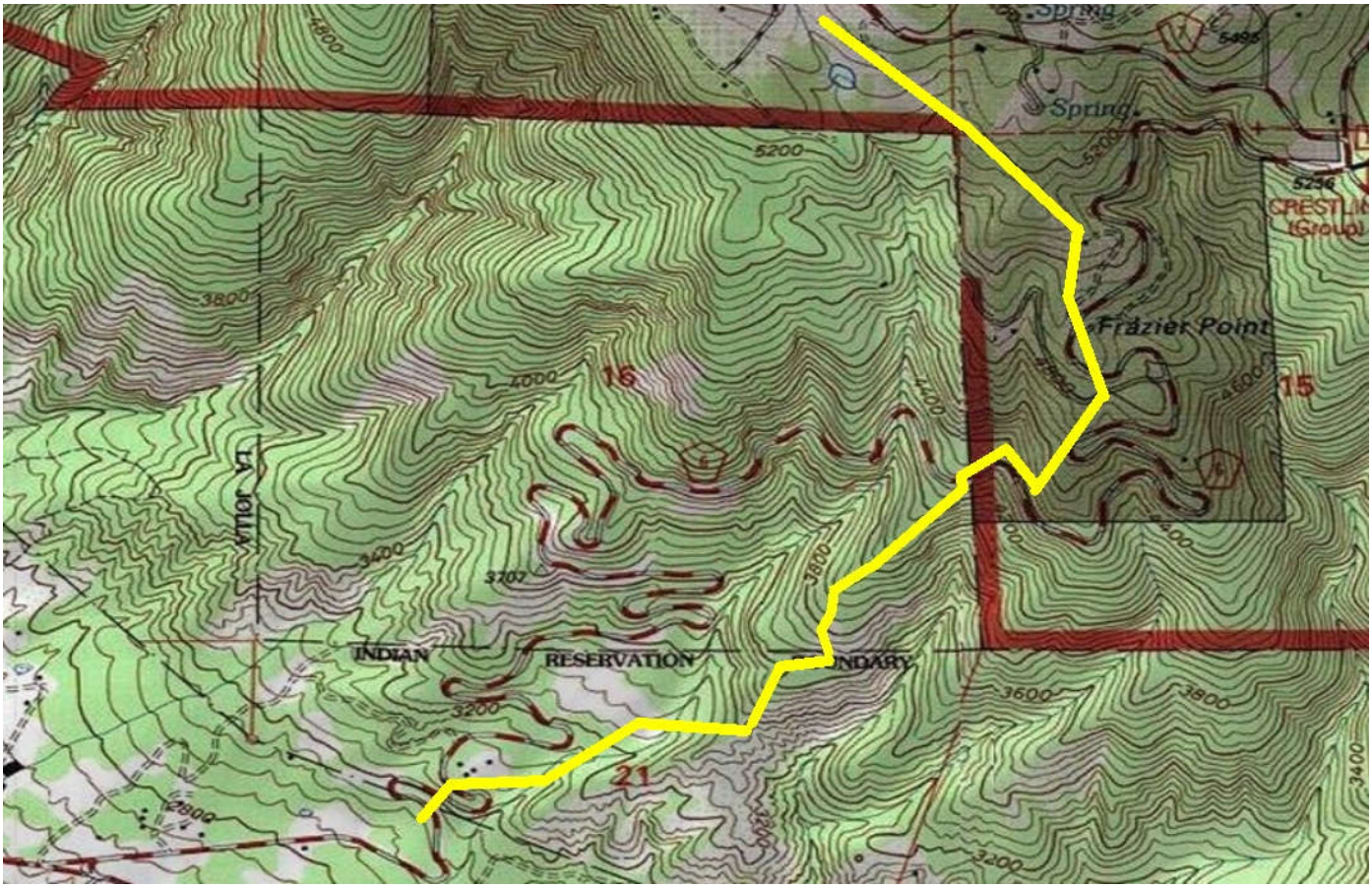
> The auditor and treasurer were directed to transfer from the general road fund to the Smith Mountain road fund the sum of $1,000. The claim of Clark Cleaver of $1,000 on the Smith Mountain road fund for constructing a road in Smith Mountain district, according to the contract on file in the office of the Board of Supervisors, dated September 10, 1891, was presented. The claim was examined and allowed. The auditor was directed to draw his warrant for the sum of $1,000 and the treasurer to pay the same.

At its meeting on January 19, 1892, the County Board of Supervisors directed the transfer of monies from the Smith mountain road fund to the Palomar road fund [44].

The 1891 Trujillo Road route up the south side of Palomar Mountain was not the same as the route of the later County Road S6, which was specially constructed to have a consistent grade and turn radius to truck the telescope glass and observatory building materials up Palomar Mountain. The Trujillo Road had grades in some places as high as 24 percent [10].



The 1891 Trujillo Road route on the U.S.G.S. 1903 Ramona quadrangle map



Approx route of 1891 Trujillo Road to Nellie (in yellow), overlaid on modern map with County Highway S6

A report in the National City Record on a July 1892 camping trip to Palomar Mountain described the Trujillo Road [11]:

> Back from the Mountains
>
> The camping party, composed of John Andrews and Clint, Geb and Bus Kimball, returned from their trip to the Smith Mountains last Thursday, and report as having had a very pleasant time. … They found the road (?) leading on top of the mountain from the South side, via Nellie postoffice, to be the worst one in the county that they had traveled, the usual way of coming down the mountain being that of cutting a small tree and tieing it behind the wagon to help "brake down" with, and in this manner one can reach the bottom, but it is not a very good road for a county that expends so much money on her "back country" roads. The boys spent a very pleasant week on top of the mountain …

On July 11, 1892, the Los Angeles Herald published an account of A.W. Birdsall's bicycle trip from Pomona to San Diego via Palomar Mountain, involving ascent and descent of the Trujillo Road [64]:

> … Left Pala feeling first class. Walked 12 miles over Smith mountain, through wild grapes, maples and a few pines – a most romantic trip, but an awful hard one. The road was terrible. Reached the summit, 12 miles, in three hours – pretty good walking up hill. Started down grade and made 11 miles in 28 minutes – fast time. Reached Escondido at 12:28 p.m. and enjoyed dinner. Started for San Diego. Cromwell's knee gave out, caused by a bad fall on the Pala grade. …

Trujillo Road, August 1896
Caption: Palomar Grade, Camping Is Not What It Is Cracked Up To Be – It's Better
Photographer Percy Smith Cox, #136. Collection of Peter Brueggeman

A report in the Escondido Times of a Palomar Mountain trip in August 1892 described the Trujillo Road [12]:

> … we begin to climb the grade, which is three miles in length. The engineering has been very skillfully done. The road winds round the spurs of the mountain in loupes, backward and forward, creeping at places along the sides of almost perpendicular precipices, at times an easy grade, then a sharp climb that tries the mettle of the team. In no place is the road wider than is absolutely necessary for safety, except a few places widened for turnouts.

> One of our party went ahead to look for teams and give warning of their approach, a very necessary precaution, as to meet on the narrow passages might prove a serious matter. The road is well shaded by oak trees, and we made frequent stops to rest the team and enjoy the beautiful landscape that, like the kaleidoscope, was ever changing, and with each change growing more beautiful. From one point near the top of the grade the view commanded a hundred miles of coast line, with the Coronado and Catalina Islands in plain view. The surf could be seen breaking on the shores 30 miles away, and the wide heaving expanse of ocean as it lay like a mirror before us was lost in the hazy mists of the horizon, which hides from view the land of romance, mystery and song. Within a few rods of the top of the grade a small stream crosses the road. Here we watered the team and rested in the shade. … A sharp pull from this place and we are on top of the mountain, so to speak. … Here there is an opening with luxuriant grass and in places heavily covered with brakes or ferns. Following the trail we leave the summit and descend into a valley where we find the post-office in charge of Mr. T. O. Bailey. … We had heard a great deal of talk about the difficulty of getting down the mountain, about the trees and logs teamsters have to attach to their wagons to act as drags, and such talk is calculated to excite apprehension in the mind of a nervous person, but it need not do so. We managed to secure a large straggling tree top and chained it to the hind axle, it was just heavy enough so that on the easy grades the horses had to pull lightly on it, then on the steep grades by setting the lock we went down easily and with perfect safety. As we said in the commencement of this article, there is nothing to fear on the grades with a properly equipped team. We found the ride down the mountain one of the most delightful experiences we had on the trip. …

On April 22, 1893, The San Diegan-Sun newspaper reported on linking the Trujillo Road with the East Grade road [206]:

> PALOMAR PINES
>
> A Beautiful Region but Little Known in San Diego.
>
> Deputy County Surveyor Allen was in the city yesterday from Smith mountain, or Palomar, where he is surveying a road over and around the summit to connect with the road leading up from Pala with the road from the Warner's ranch country. Allen is enthusiastic over that region of country, which he declares is in some respects the finest in the county. The soil is good and the water is plenty, and just now, in addition to these attractions, there are a number of deep snow banks on the north slopes. The timber of the mountain, he says, is the finest in the county. He measured one tree that was twenty-four feet in circumference, and run up seventy-five feet before it sprouted a limb. On one acre, which was measured off, there were fifty trees

> which would average 1000 feet of good lumber to the tree, or 50,000 feet to the acre. The Palomar pine is somewhat heavier than eastern pine, but not so heavy as Oregon pine. A sawmill is now in operation on the mountain.

On June 29, 1893, the Escondido Times reported on the Trujillo Road [112]:

> PALOMAR, A Fine Place for Summer Outings.
>
> Capt. Allen has just returned from the top of Palomar mountain, where he has been surveying a new road. ... A new grade has been completed leading up to the mountain from Escondido, and this road makes it possible to do teaming to and from Striplin & Wilhite's sawmill. As a result the mill has resumed operations to its fullest capacity, and so far all the timber wanted is to be had within half a mile. ...

In Samuel Striplin's 1911 obituary in the Los Angeles Times, his lumber hauling journeys down from Palomar on the Trujillo Road are mentioned [113]:

> … Mr. Striplin owned and operated a saw mill on the top of Palomar Mountain, hauling much of the product of the mill overland to San Diego, a distance of sixty-five miles. In getting the trees from the forests to the mill oxen were used, but in the haul down the side of the mountain, a drop of several thousand feet, over a long rough grade, mules were employed. Scores of times Mr. Striplin has piloted a six-mule team down the mountain, with 6000 feet of lumber scattered astride the near wagon mule with only a "jerk line" as a guide in keeping the animal in the road and the big load of lumber right side up. His ability to perform these stunts without accident was the marvel of those pioneer days, inasmuch as it was known that every time he attempted the descent he took his life in his hands. …

There are several newspaper mentions of Samuel Striplin bringing loads of wood down the Trujillo Road from his sawmill. On December 14, 1893, the Escondido Times reported [168]:

> Samuel Striplin brought down an eight-mule load of sawed oak lumber from Palomar mountain Tuesday, and this Wednesday started for San Diego with the same. The load weighed something over 8,000 pounds, and the lumber was sawed at the Striplin mill on the mountain. …

On April 7, 1894, the San Diego Union reported [29]:

> Samuel Striplin brought down another eight-horse load of Palomar mountain oak a few days ago for one of the local wagon-makers.

On May 20, 1894, the Los Angeles Herald reported [166]:

> Samuel Striplin brought in another eight-horse load of Palomar mountain oak on Wednesday, which is being used extensively for wagon making and repairing

On January 3, 1894, the San Diegan-Sun published a letter to the editor on road taxes from Clark Cleaver dated December 30, 1893 [15]:

> HOW ABOUT ROADS?
>
> A Palomar Mountain Man Heard From.
>
> WHO ELSE TAKES AN INTEREST IN IT?
>
> A Special Election for a Property Tax as Opposed to the Bond Proposition.
>
> The following suggestion is recommended for consideration to the delegates appointed by the supervisors to hold a county road convention at the chamber of commerce next Tuesday:
>
> EDITOR SAN DIEGAN-SUN – As there is a call for a road meeting to get an expression of opinion on the road question I would like to state a few facts which seem to have a bearing on the subject. The condition here is probably duplicated in other parts of the back country, and like our own case will long remain “back country” if not assisted from the outside to get passable roads. With climate, moisture, soil and other conditions adapted to all the deciduous fruits and berries, as the orchards now coming into bearing abundantly prove, it must long remain a comparative wilderness through lack of good roads. And yet here are 20,000 acres of the best orchard land, and which would pay a good revenue to the county if the roads were reasonably good.
>
> Especially is this the case in regard to the lumber interest, which would be large if encouraged with a prospect of better roads. There is on this mountain timber enough to make 60,000,000 feet of lumber of the best quality, consisting of fir, hemlock, pine, cedar, and a large variety of oak. But to be made available roads would have to be built. And to get to the best and largest body of timber it would be necessary to extend the Palomar grade

about four miles northwest. Also for a part of the timber the road should go out the Temecula highway. The small body of timber the Striplin & Willhite mill is being run on will not last much more than a year. The demand for lumber seems insatiable. The buyers take it wet from the saw, though, in going down the grade they have to drag a tree behind their wagons to assist the brake. Palomar grade was built when we were compelled to have a road of some kind to get out, or quit the mountain, and as we had no money to make bridges, etc., across deep canyons, we were necessitated to build it down one point most of the way. People can say that it should have been built on the right grade as far as the money would go, but that would have left us without any way out. The pioneer must build his house, barn, roads, etc., as he can, not as he would.

The voting of bonds being in the hands of the people is often opposed by residents of other settled sections, level portions of the county where roads are good, also often by wealthy large land owners, who profit by the poor man's work and necessities and pay the lightest taxes. For reasons like these a special election for property tax purposes would be more just than the county bond proposition. But there should be some way to build good roads, and as the future population is to get the greatest benefit from the outlay of the present it is only right that they should pay a fair share of the cost.

Probably the county bond proposition is the most feasible, and as the whole county is a sharer in the benefits of each section the county should assist. But there are some "away backs" who would oppose any measure requiring taxation, though it doubled the value of their property. Of such is the kingdom of silurians. CLARK CLEAVER

Nellie P.O. (Palomar mountain), Dec. 30, '93.

On June 14, 1894, the Escondido Times reported on the Trujillo Road [45]:

M.A. Cochran, the road overseer, is doing good work on the roads. He is also putting in a large tank and laying pipe for a watering place at the old camp on the road to the foot of the mountain, which will gladden the hearts of all teamsters.

Constance Restarick Withington reminisced on travel to Palomar Mountain via the Trujillo Road in 1895-1896 [13]:

… When I was ten or eleven years old, my mother was threatened with tuberculosis and the doctor … ordered my father to take her in the back country where the dry air… was held to be … beneficial to those with lung and bronchial ailments. Thus began our summers camping on Mt. Palomar. … In 1896 it was a two or three days journey by 'stage' as the wagon, drawn

by four or six horses was called, … How well I remember the day Mr. Bleven drove up … in his wagon drawn by four horses. There were two wide seats which accommodated the five of us, the driver and the cook. … We made thirty miles the first day and spent the night in Escondido… The next day we drove through Valley Center and spent the night at the Indian Reservation of Rin Con … We had now driven 55 miles. The roads were only dirt roads, of course, and we had made good time with our heavy load, but now the hardest part of the trek was yet to come for the climb to the top of the mountain, was up a steep grade of, dare I say 25 percent? Mr. Bleven procured another pair of horses and we all got out and walked. Even so it was all the horses could do to pull up the almost precipitous ascent. Late the afternoon of the third day, we pulled up to the adobe cottage at a place called Iron Springs, which my father had rented for the summer. …

A Bright Idea by the BBB, Camping on Palomar, 1896
Gag photo showing how to hike up steep trails and roads on Palomar
Escondido History Center

Catharine Wood writes about the Trujillo Road [1]:

Senator Ed Fletcher of San Diego, in his bicycling days in the early 1890s, pushed his bicycle to the top of the mountain over the south slide, and rode down on an apple wagon with a tree tied behind it.

Trujillo Road or South Grade, August 1896

Photographer Percy Smith Cox, #384. Frances Bevan Ryan Papers, Escondido Public Library Pioneer Room

Richmond Goodwin said this about the Trujillo Road in 1895 [14]:

> About 1895 when I was about 15 or 16 years old I worked for George Doane on his big ranch on Palomar Mountain. … There was a pretty good road called the Slide Road from the upper end of the Indian Reservation. It went down the east end of the reservation. When you started down you would cut a tree and hitch it on behind the wagon to brake you down the hill. They called it the Slide Road because there were lots of slides. At that time there was no road up what they now call (Nate Harrison) Grade, there was just a horse trail down though there. Sometimes Doane came down the trail and sometimes down the road.

Wagons going downhill on Trujillo Road using cut trees as a drag brake, August 1896

Photographer Percy Smith Cox, #409. Frances Bevan Ryan Papers, Escondido Public Library Pioneer Room

Trujillo Road, August 1896
Photographer Percy Smith Cox, California State Library

On October 21, 1895, the San Diego Union reported on Samuel Striplin having an accident hauling timber down the East Grade [167]:

> Samuel Striplin of the Smith mountain saw mill had an accident Friday morning while on his way to Julian that came near being serious. He was coming down the grade to the Warner ranch, the foot of which is where the San Luis Rey river leaves the valley. The grade is about a mile long and one of the steepest in the county. He had a six-mule team loaded with mining timbers for the Owens mine. About half way down the grade the brake refused to work and the wagon ran down for about 200 yards when it struck the bank, and wagon, lumber, and mules were piled up in an indiscriminate heap. One of the mules was so badly injured that it had to be killed. The others were not much hurt. Mr. Striplin himself jumped off during the run down and was therefore uninjured.

On August 6, 1896, the San Diego Weekly Union published a report by E.J. Swayne on a trip to Palomar Mountain mentioning the Trujillo Road and the East Grade [188]:

> … There are two routes to the top of this portion of the mountain – one via Escondido and Valley Center, and the other via Santa Maria, Santa Isabel and Warner's ranch.. The latter, although some miles longer, I consider the

more desirable. The roads are good. Of course the mountain grades are steep and one should calculate his loads accordingly. The ever-changing scenes of hill, dale, ravine, canyon, the outspread valleys, the towering mountains in the distance, break all monotony, and long before one reaches the summit, as one takes in that magnificent view which comprehends in one scene the many minor mountains, the petite and greater valleys and ranges from the Cuyamacas to the sea, one feels repaid for all the journey. …

Wagon nearing the bottom of Trujillo Road, August 1896
Photographer Percy Smith Cox. Collection of Peter Brueggeman

On September 7, 1896, the San Diego County Board of Supervisors received and filed a petition on the proposed Nate Harrison Grade "from William E. Bougher and others asking for a road from a point on the highway from Rincon to Pala to a connection with Palomar grade near the summit of Palomar mountain [46]."

On September 24, 1896, the San Diego Weekly Union reported on the proposed Nate Harrison Grade [47]:

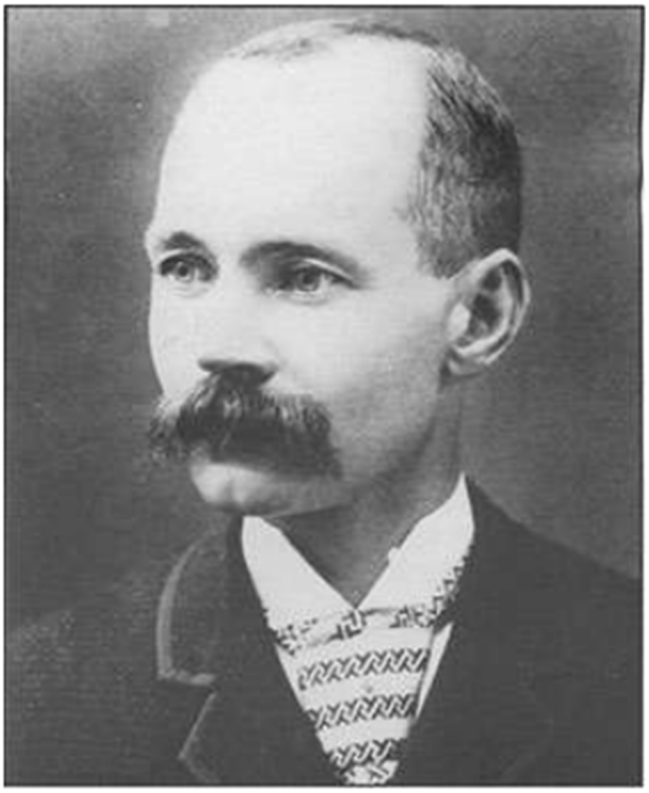
> A new grade is to be surveyed on the Smith mountain road, making a better grade from the Pauma Indian village up Oat ridge. Work on the highway will probably be commenced soon after the fall rains.

On October 1, 1896, the San Diego Weekly Union reported on the Nate Harrison Grade [17]:

> ON SMITH MOUNTAIN
>
> New Road to Open up Timber and Potato Country
>
> Supervisor Griffin informs the Oceanside Blade that a preliminary survey has been made up the Oat Ridge trail, on Smith mountain, with a maximum grade of less than 10 per cent, and an average of about 6, which was a vast improvement over the grade now used, which in some places was as high as 24 per cent. The proposition is to build this new road at the expense of the people most interested, conjointly with the county. There is a vast amount of timber on the mountain that can readily be made into box and bee material, bridge timbers and for numerous other purposes, but at present there is no way of getting it down. Besides a great many potatoes of the finest quality can be raised there, which at the present time have no market, while, as it is, the entire people of this section are sending the most of their money out of the county and to the north for them, and getting an inferior article.

Robert T. Vaughan (1879-1960) reminisced about a trip he took with his mother to Palomar Mountain; they stayed in a log cabin near Wilhite's closed sawmill and heard about Samuel Striplin hauling timber down the Trujillo Road [114]. Vaughan said the trip was "about 1890" but it was after 1896 since he used the past tense in mentioning the Striplin sawmill.

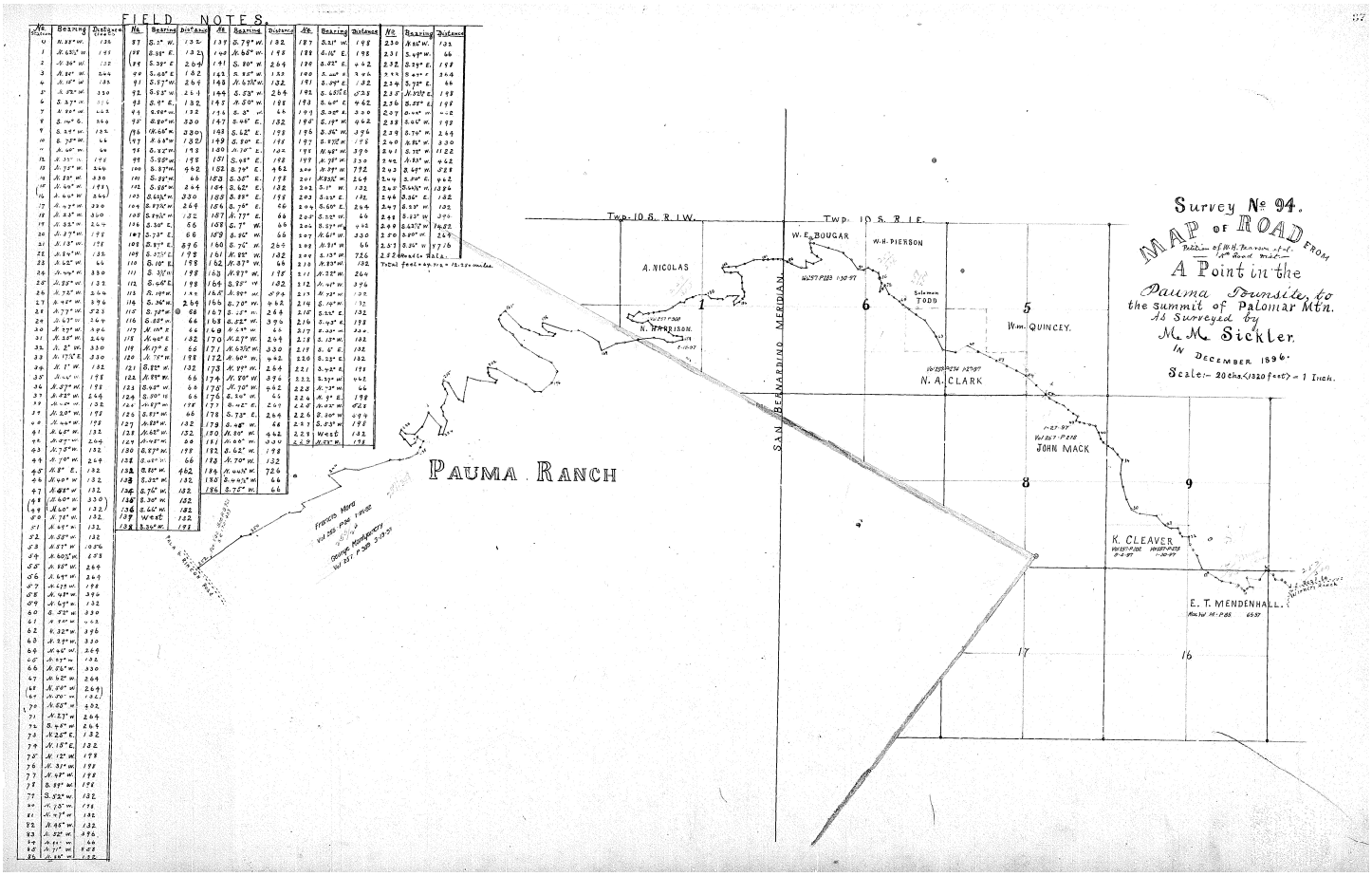
> Baileys told us we could get a log cabin to stay in nearby, where there had been a saw mill (Wilhite I believe was the last saw-mill-operator). People told us how a Mr. Striplin used to drive a six-mule team with a jerk line down the mountain with a load of lumber. When he went down the steep grade, he would chain a good sized tree back of the load to act as a brake. At the foot of the grade, he would roll these trees off the road.



Marion Marcellus Sickler, circa late 1870s [48]

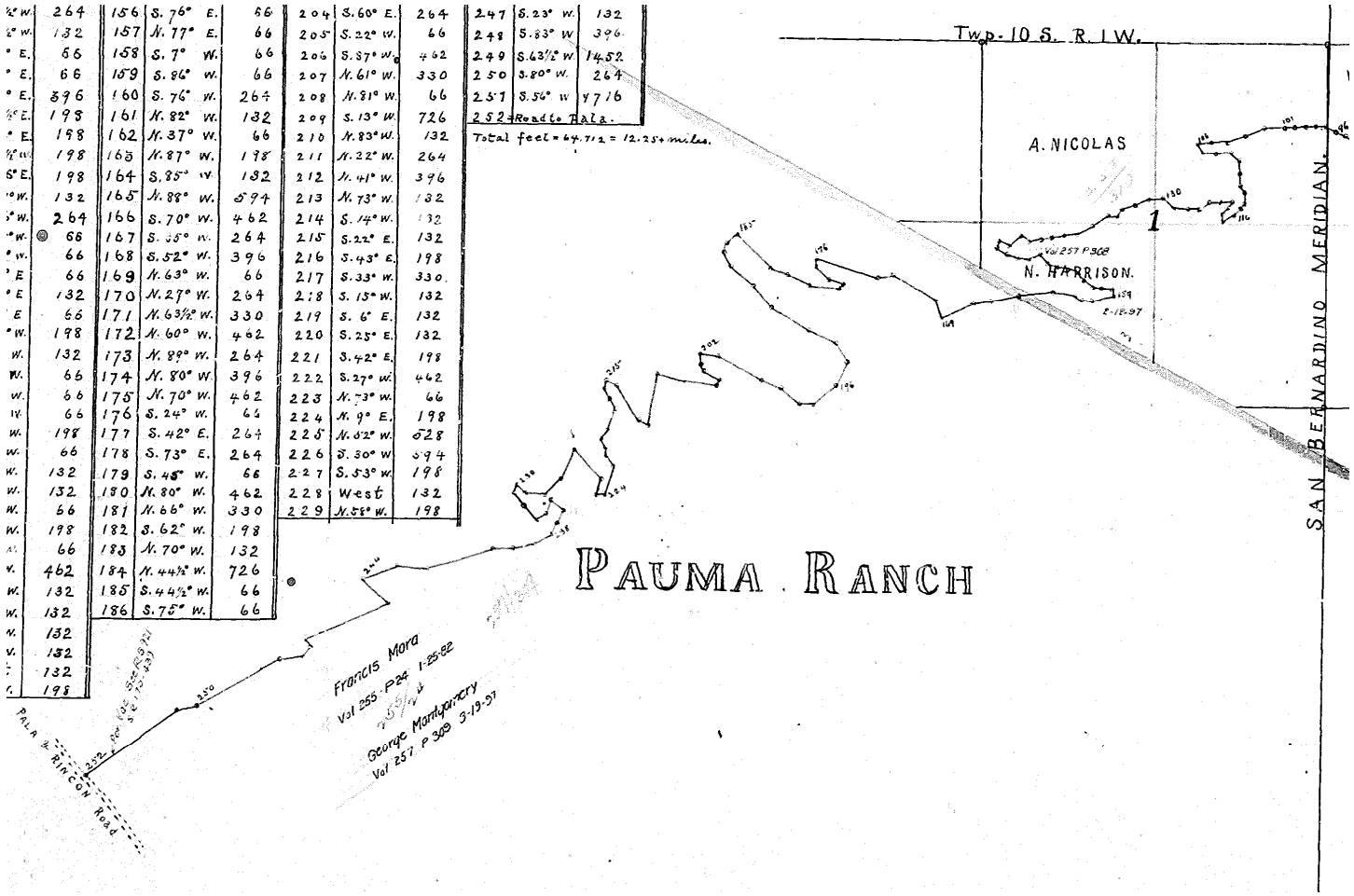
A survey of the prospective Nate Harrison Grade road was completed in December 1896 by Marion Marcellus Sickler (1852-1940) and was a significant improvement over the southern Trujillo Road. Marion Marcellus Sicker and his brother William Arthelo Sickler ran the grist mill along the San Luis Rey River near Pala [48].

The Nate Harrison Grade road had a maximum grade of ten per cent and an average of about six per cent, whereas the Trujillo Road had grades in some places as high as 24 percent [10,17].

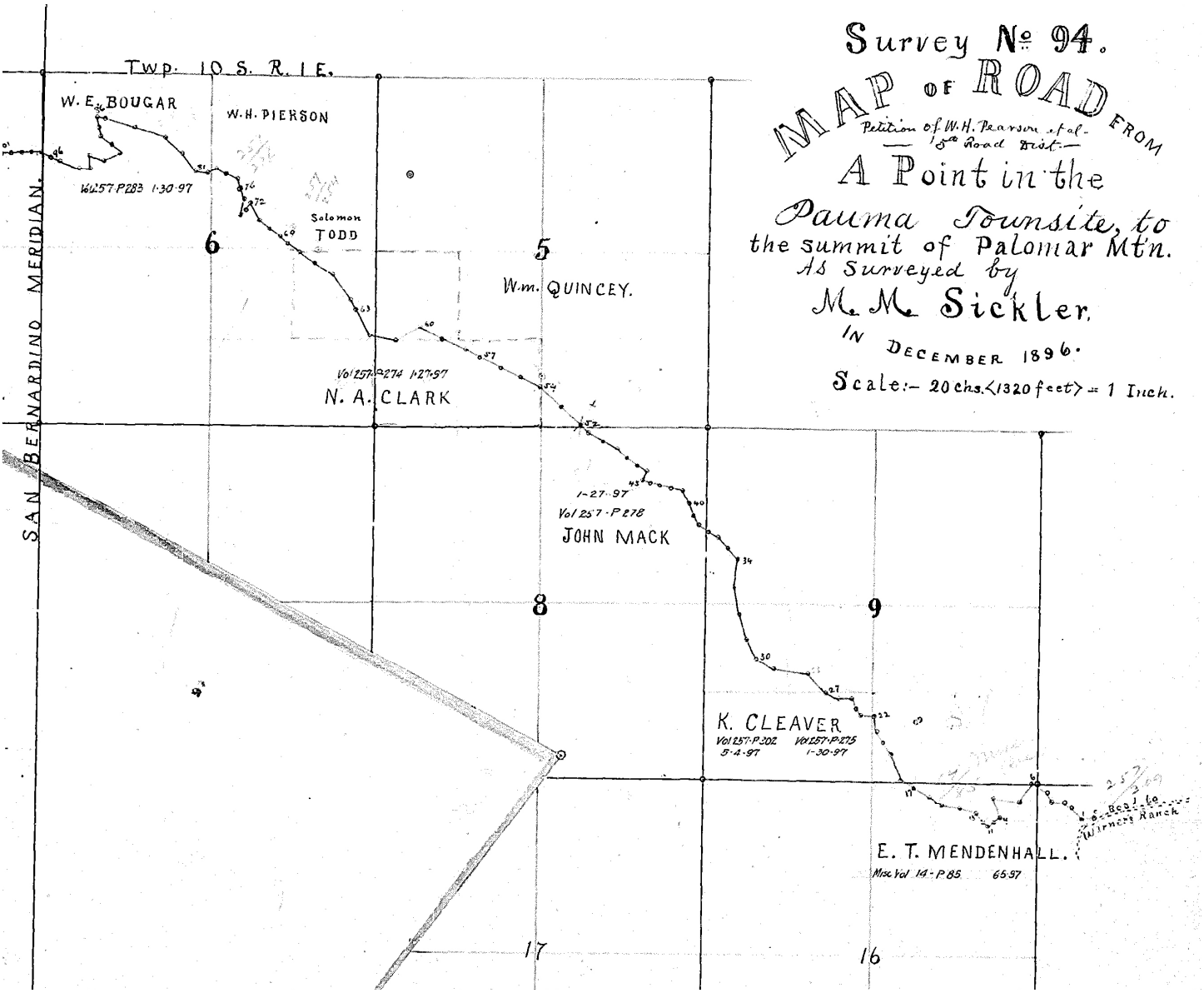


Marion M. Sickler's 1896 survey of a road route up Palomar Mountain from Pauma, the future Nate Harrison Grade [3]

Kimber Cleaver, Enos T. Mendenhall, John Mack, William Quincey, Newton Ambrose Clark, Solomon Todd, William H. Pearson, William E. Bougher, Augusti Nicolas, and Nate Harrison granted San Diego County easements across their land for the construction of the Nate Harrison Grade up Palomar Mountain [3,16].



Left side of Marion M. Sickler's 1896 survey of a road route up Palomar Mountain from Pauma, the future Nate Harrison Grade [3]



Right side of Marion M. Sickler's 1896 survey of a road route up Palomar Mountain from Pauma, the future Nate Harrison Grade [3]

On January 7, 1897, the San Diego Union reported on the Nate Harrison Grade [49]:

> UP ON SMITH MOUNTAIN
>
> People There Working for a New Road – An Ideal Resort
>
> J.M. Mack of Smith Mountain is in the city. He came down from the high hills to interview the board of supervisors regarding the new road on the mountain. The people on the mountain have subscribed $750 toward it, and the people at the foot, in the Fallbrook and Escondido country, have raised $250. The supervisors are expected to help these enterprising people along, and they doubtless will. "The people up there have employed a surveyor," said Mr. Mack yesterday, "and he has run a good line from Pauma creek clear to the summit, and in no place is the grade over 20 per cent. M. Vail

was the surveyor, and the people up our way helped him do the work. We are bound to have a good road, and the supervisors ought to help us. I have no doubt that we will get substantial assistance. We have raised $1,000 toward the object already. You know Smith Mountain is getting to be quite a summer resort lately. It would surprise new arrivals in this town to know that we have lots of fir trees up there eight feet through and 200 feet tall. Then we have ice-cold springs, bubbling up the finest water that you ever tasted, and scenery full of beauty. In some places the forest is so heavy that semi-darkness reigns. The glades and greenwood slopes remind one of the enchanted forest of Arden, and they are just as beautiful. We are in love with our lofty mountain home, and we want people to come and see us and share the health and beauty that is now going to waste for lack of a good road."

On January 22, 1897, the San Diego Evening Sun reported on the Nate Harrison Grade [50]:

New Road Up Palomar

J.M. Mack of Nellie came down from his home at Nellie the first of the week to do some trading and renew his acquaintance with Fallbrook people. Mr. Mack says that there will be a larger crowd than ever in the camping grounds on Smith mountain this summer, owing partly to the convenience of a new road which has just been surveyed up the mountain grade. The road has been surveyed by W.A. Sickler and others, and will run from Pauma creek up Oat ridge, nearly to Nellie church. It is about 13 miles long, about 8 ½ miles of which are on the ridge. At no place on the road will the grade exceed 10 per cent. Mr. Mack says that the people of Nellie and vicinity have made a subscription of about $1000 to be applied on the work. – *Fallbrook Observer*.

On March 18, 1897, the San Diego Weekly Union reported on the Nate Harrison Grade [51]:

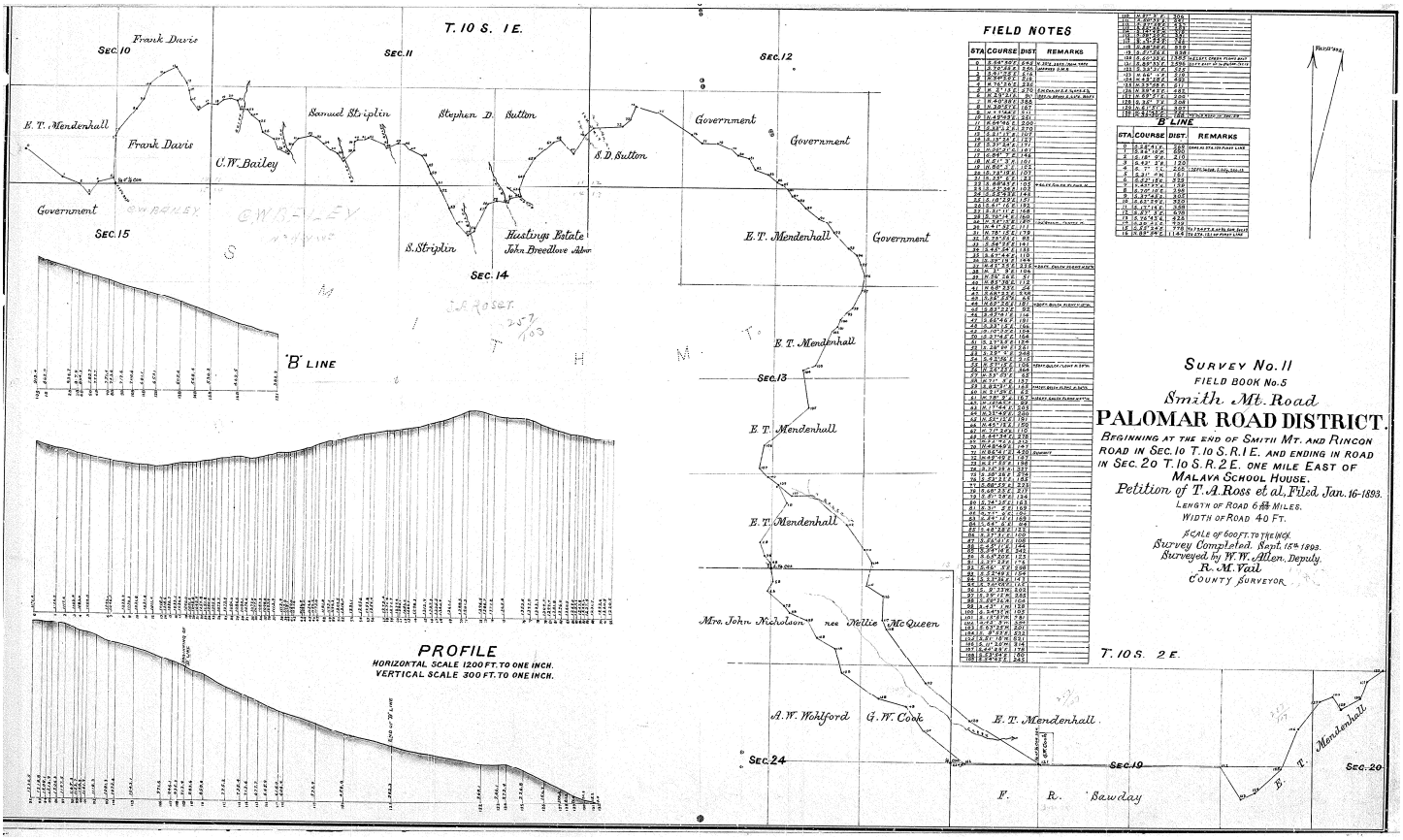
> Work has begun on a new road to the summit of Smith mountain. It is estimated that a hundred men will be employed for a month or so building thirteen miles of road.

On June 8, 1897, the Los Angeles Herald reported on the Nate Harrison Grade, using the name South mountain instead of Smith mountain [52]:

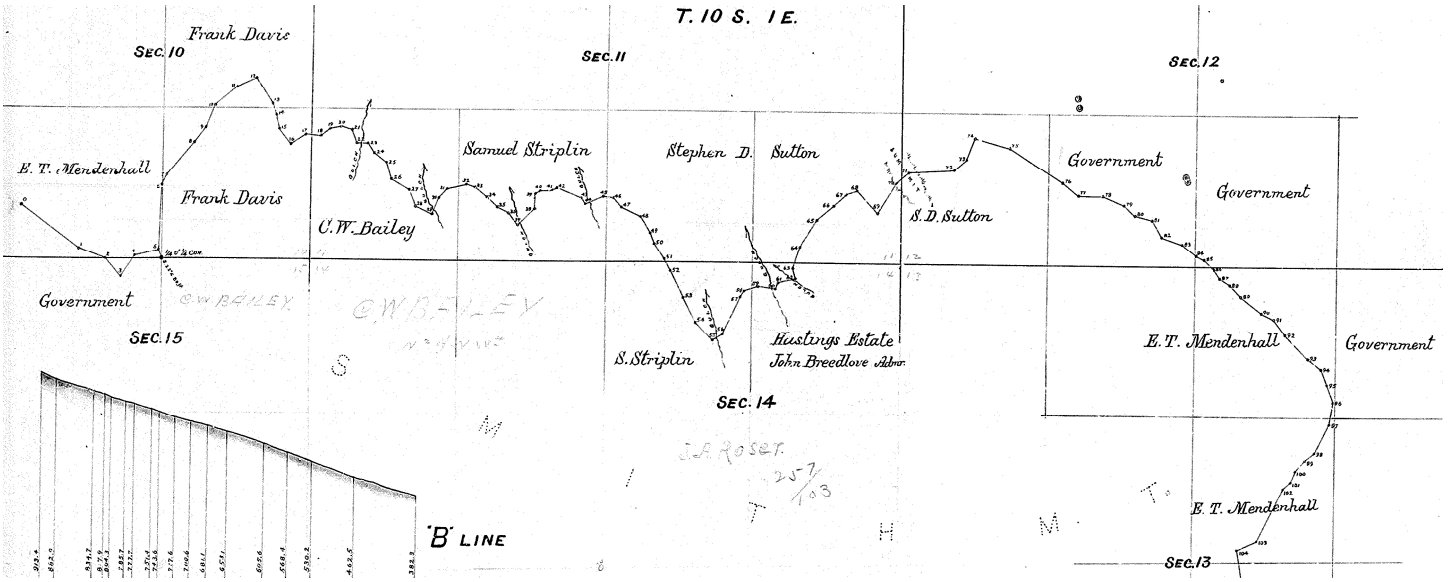
> The new grade to the summit of South mountain, the building of which has been agitated for some time, and strenuously opposed by some of the land barons in that section, is now assured, all rights of way have been secured and work is to begin soon. It will be nearly a year, however, before the road is ready for travel, as it is about nine miles from the base of the mountain to the summit and a great deal of rock work must be done. It is said the steepest grade will not be more than 10 per cent. South or Palomar mountain is an ideal camping place, the pine trees, cool water and lovely scenery rivaling Strawberry valley on San Jacinto, while the game on the mountain is very plentiful.

On August 12, 1897, the San Diego Weekly Union reported on the Nate Harrison Grade [53]:

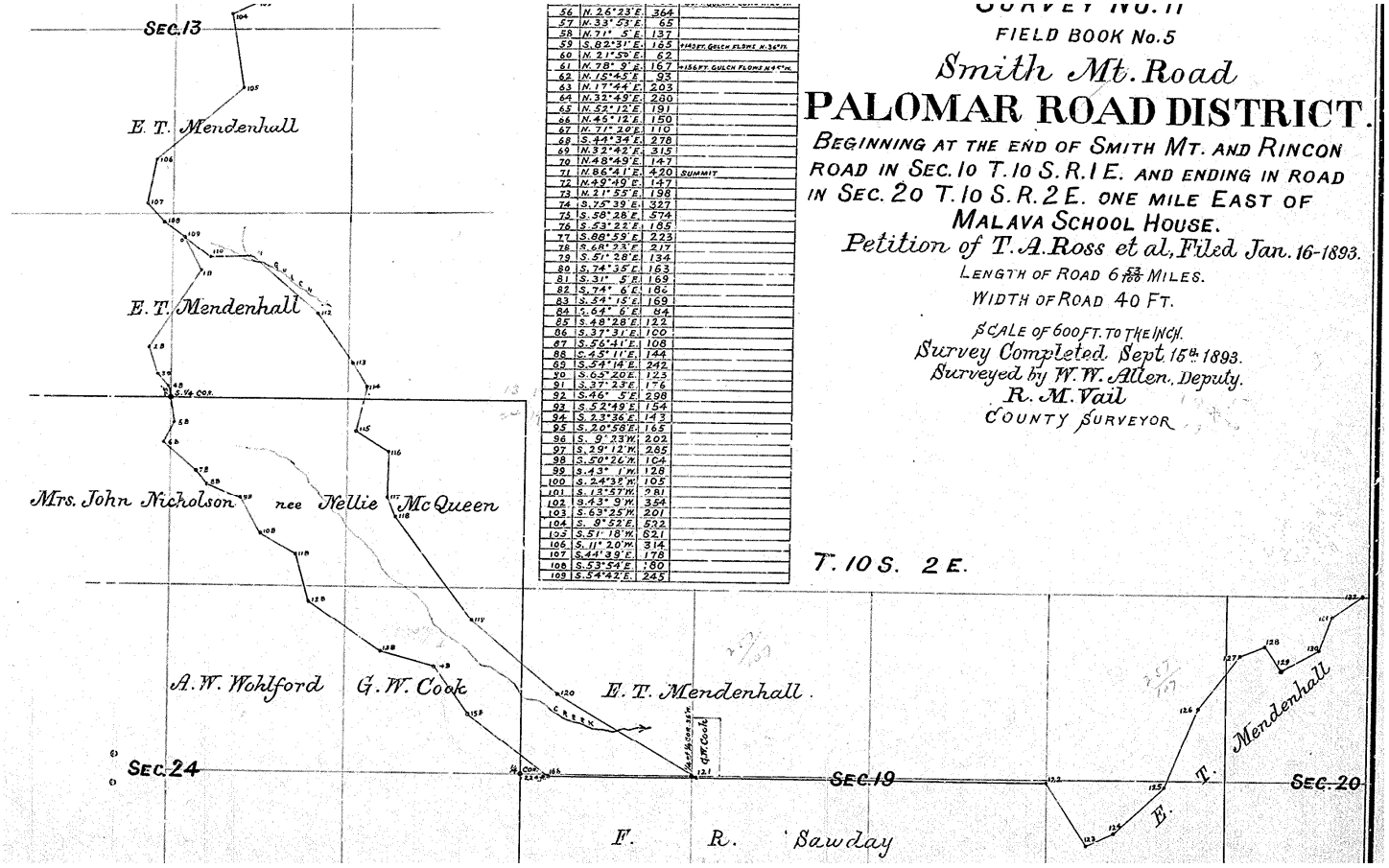
> Hiram Cook, of Smith mountain, was down in Escondido Wednesday. He reports work on the new grade up the mountain as progressing rapidly.



W.W. Allen's 1898 survey of an eastern road route of 6.5 miles length, starting west of Nellie (Bailey's), then eastward past the George Washington Cook house to Will Valley [3]



Left side of W.W. Allen's 1898 survey of an eastern road route of 6.5 miles length, starting west of Nellie (Bailey's), then eastward past the George Washington Cook house to Will Valley [3]


SEC. 13
E. T. Mendenhall
E. T. Mendenhall
Mrs. John Nicholson nee Nellie McQueen
A. W. Wohlford
G. W. Cook
E. T. Mendenhall
SEC. 24
SEC. 19
SEC. 20
F. R. Sawday
T. 10 S. 2 E.
FIELD BOOK No. 5
Smith Mt. Road
PALOMAR ROAD DISTRICT.
BEGINNING AT THE END OF SMITH MT. AND RINCON ROAD IN SEC. 10 T. 10 S. R. 1 E. AND ENDING IN ROAD IN SEC. 20 T. 10 S. R. 2 E. ONE MILE EAST OF MALAVA SCHOOL HOUSE.
Petition of T. A. Ross et al, Filed Jan. 16-1893.
LENGTH OF ROAD 6 53/100 MILES.
WIDTH OF ROAD 40 FT.
SCALE OF 600 FT. TO THE INCH.
Survey Completed Sept. 15th 1893.
Surveyed by W. W. Allen, Deputy.
R. M. Vail
COUNTY SURVEYOR

56	N. 26° 23' E.	364	
57	N. 33° 53' E.	65	
58	N. 71° 5' E.	137	
59	S. 82° 31' E.	165	*140 FT. GULCH FLOWS N. 36° W.
60	N. 21° 55' E.	62	
61	N. 78° 9' E.	167	*156 FT. GULCH FLOWS N. 4° W.
62	N. 15° 45' E.	93	
63	N. 17° 44' E.	203	
64	N. 33° 49' E.	280	
65	N. 52° 12' E.	191	
66	N. 45° 12' E.	150	
67	N. 71° 20' E.	110	
68	S. 44° 34' E.	276	
69	N. 32° 42' E.	315	
70	N. 48° 49' E.	147	
71	N. 86° 41' E.	420	SUMMIT
72	N. 49° 49' E.	147	
73	N. 21° 55' E.	198	
74	S. 15° 39' E.	327	
75	S. 58° 28' E.	574	
76	S. 53° 22' E.	185	
77	S. 88° 59' E.	223	
78	S. 68° 23' E.	217	
79	S. 29° 28' E.	134	
80	S. 74° 35' E.	163	
81	S. 31° 5' E.	169	
82	S. 74° 6' E.	186	
83	S. 54° 15' E.	169	
84	S. 64° 5' E.	154	
85	S. 48° 28' E.	122	
86	S. 37° 31' E.	100	
87	S. 56° 41' E.	108	
88	S. 43° 11' E.	144	
89	S. 34° 14' E.	242	
90	S. 65° 20' E.	125	
91	S. 37° 23' E.	176	
92	S. 46° 5' E.	298	
93	S. 52° 49' E.	154	
94	S. 23° 36' E.	143	
95	S. 20° 58' E.	165	
96	S. 9° 23' W.	202	
97	S. 29° 12' W.	285	
98	S. 50° 26' W.	104	
99	S. 43° 1' W.	128	
100	S. 24° 35' W.	105	
101	S. 13° 57' W.	281	
102	S. 43° 3' W.	354	
103	S. 69° 25' W.	201	
104	S. 9° 52' E.	532	
105	S. 51° 18' W.	621	
106	S. 11° 20' W.	314	
107	S. 44° 39' E.	178	
108	S. 53° 54' E.	180	
109	S. 54° 42' E.	245	

Right side of W.W. Allen's 1898 survey of an eastern road route of 6.5 miles length, starting west of Nellie (Bailey's), then eastward past the George Washington Cook house to Will Valley [3]

The San Diego Weekly Union reported on the San Diego County Board of Supervisors' meeting on March 8, 1899, including this item about the Nate Harrison Grade [148]:

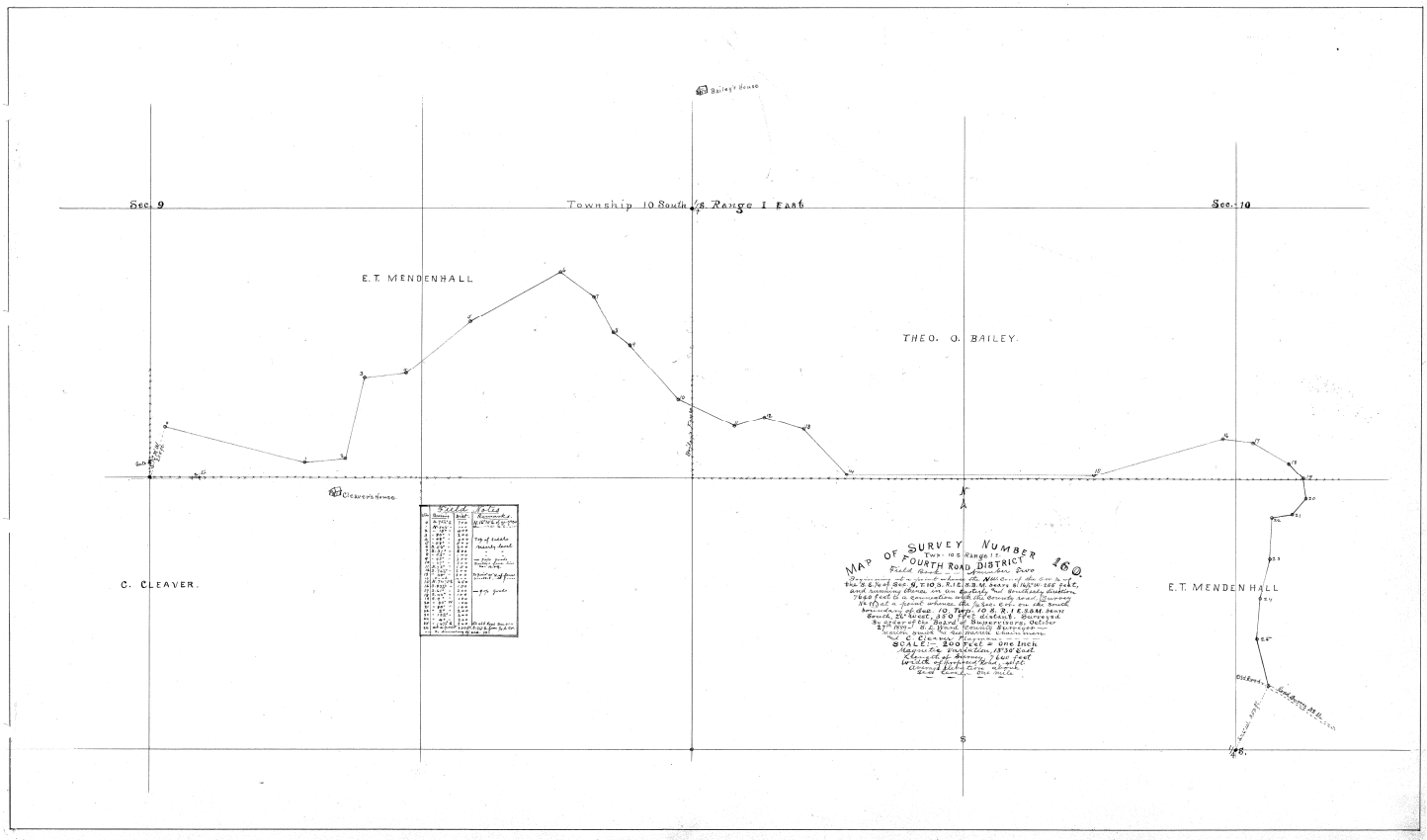
> Theodore O. Bailey appeared before the board with a petition signed by 296 persons asking for the continuation of a public highway as surveyed by M.M. Sickler, leading from the Pauma ranch onto Palomar mountain. The petition states that the highway is much needed and asks that a sufficient sum to construct the same be taken from the general fund. On motion of Jasper the petition was received and filed.

On July 28, 1899, the San Diego Union published a story by M.L. Ward on his family camping trip in back country San Diego including Palomar Mountain; they ascended Palomar via the Trujillo Road and descended via the East Grade [149]:

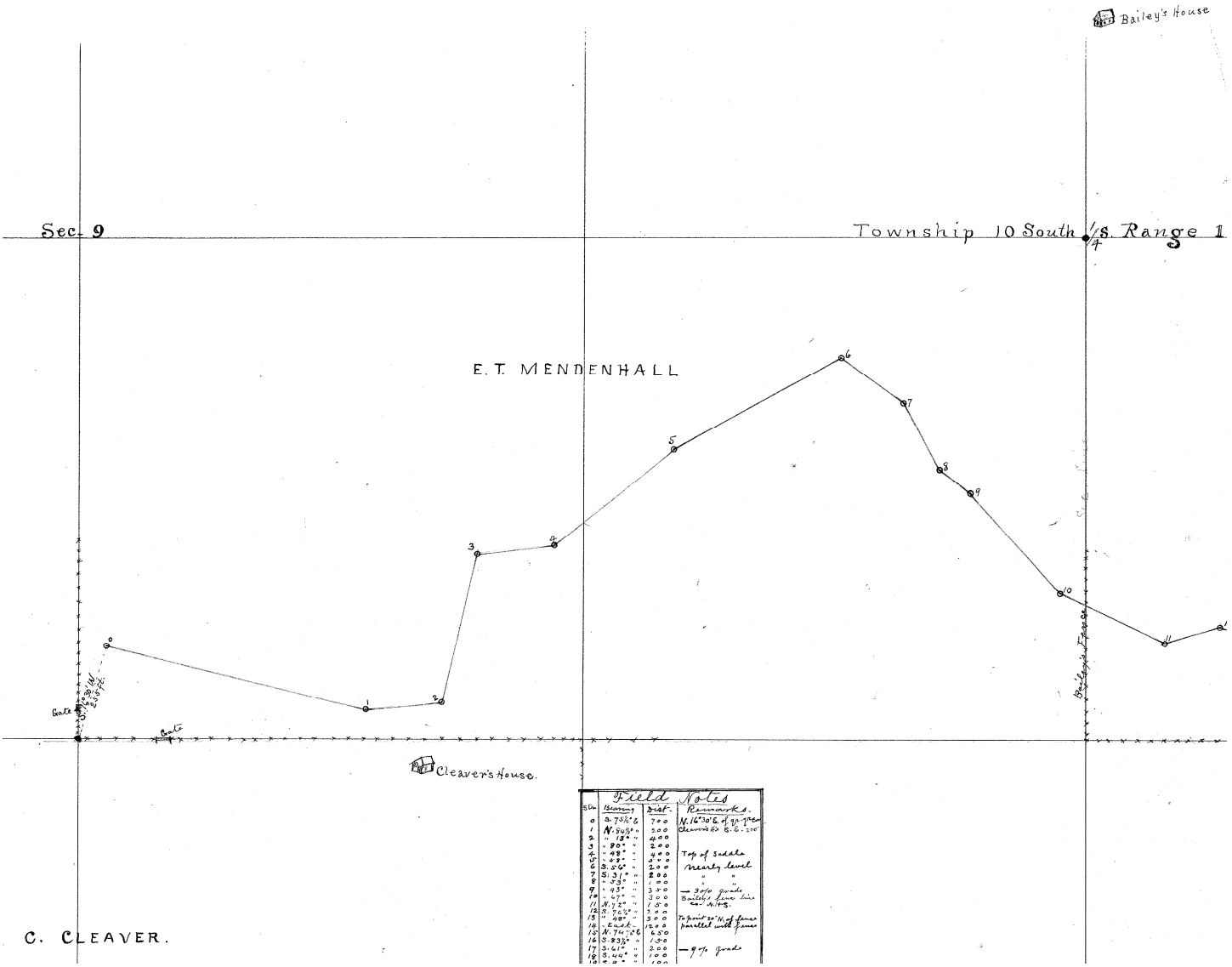
> But it is not so easy to get up on old Palomar's back. The grades leading to the summit are frightfully steep, and there seems to be no easy roads anywhere in that section. I had a stout team of horses, but after passing the Rincon on the way up, I had an Indian hitch his team to the outfit ahead of our team, and it was about all the four horses could do to drag the wagon up the mountain. All the passengers walked. Coming down the mountain into Warner's ranch the grade was almost as steep. About a mile an hour is all that can be made in going the four miles up to the summit from beyond the Rincon. Ranchers and others in that part of the county some time ago petitioned the board of supervisors to assist in making a more practicable road to the top of the mountain, but I believe the aid was not given. Some two thousand dollars was required, and this amount could be well spent on a road leading to such a magnificent resort.

On September 7, 1899, the San Diego Union reported on tax rates for a road across Palomar Mountain from Nate Harrison Grade through East Grade [54]:

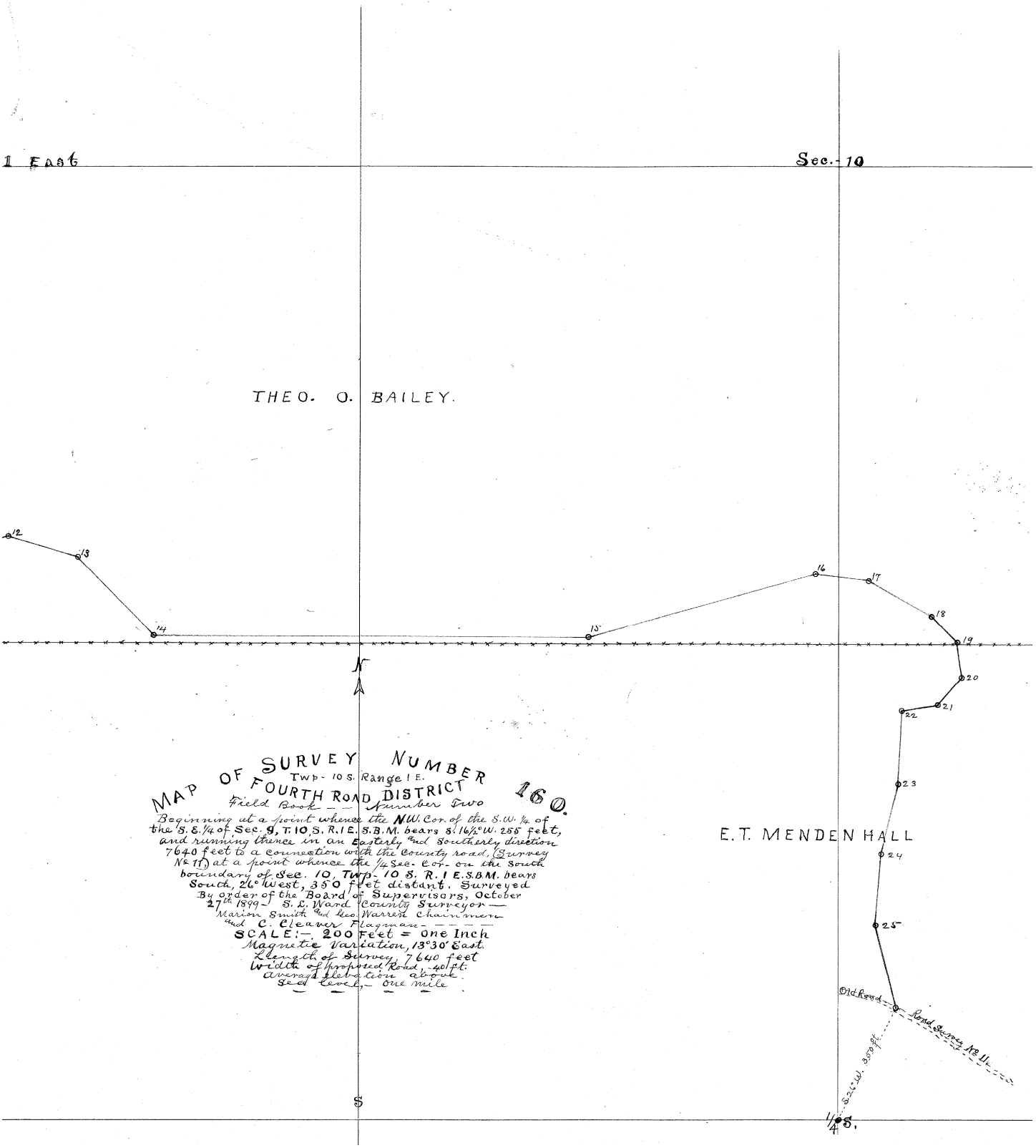
> The state and county tax rate was yesterday informally fixed by the supervisors at $1.60 on the $100 valuation for property in the city, and at $2.10 for outside property. … The larger rate for outside property is caused by the addition of a road tax of 50 cents, 10 cents of which is special. The maximum rate for the regular road tax is 40 cents, but the supervisors are allowed to levy a special tax of 20 cents when it becomes necessary. The special road tax was agreed upon so as to have money available for the improvement of the existing roads and for the building of new ones. It is the intention to build a road from Pala, over Smith mountain to connect with the Warner's ranch road. …



S. L. (Simon Lett?) Ward's October 1899 survey of a road route to extend the County road farther west to what is now the State Park [3]


Bailey's House
Sec. 9
Township 10 South, Range 1
E. T. MENDENHALL
C. CLEAVER.
Cleaver's House.
Gate
Gate
Bailey's Fence
Field Notes
Sta. Bearings Dist. Remarks
0 S. 74½° E. 700 N. 16°30'E. of sp. Tree
1 N. 84½° " 200 Observed Az. S.E. 270°
2 " 13° " 400
3 " 20° " 200
4 " 49° " 400 Top of Saddle
5 " 49° " 800 Nearly Level
6 S. 56° " 200 " "
7 S. 31° " 200 " "
8 " 23° " 100 " "
9 " 43° " 300 — 30% grade
10 " 47° " 300 Bailey's fence line
11 N. 72° " 150 cor. N.1/4 S.
12 S. 76½° " 300
13 " 48° " 300 To point 20 N. of fence
14 East 1320 parallel with fence
15 N. 74½°E 650
16 S. 93½° " 150
17 S. 61° " 200 — 9% grade
18 S. 44° " 100
19 " " " 100

Left side of S. L. (Simon Lett?) Ward's October 1899 survey of a road route to extend the County road farther west to what is now the State Park [3]


1 East
Sec. 10
THEO. O. BAILEY.
12
13
14
15
16
17
18
19
20
21
22
23
24
25
E.T. MENDENHALL
Old Road
Road Survey No 11
S. 24 W. 3570 ft.
1/4 S.
MAP OF FOURTH ROAD DISTRICT
SURVEY NUMBER 160.
Twp. 10 S. Range 1 E.
Field Book — Number Two
Beginning at a point whence the NW. Cor. of the S.W. 1/4 of the S.E. 1/4 of Sec. 9, T. 10 S. R. 1 E. S.B.M. bears S. 16½° W. 255 feet, and running thence in an Easterly and Southerly direction 7640 feet to a connection with the County road, Survey No 11) at a point whence the 1/4 Sec. Cor. on the South boundary of Sec. 10, Twp. 10 S. R. 1 E. S.B.M. bears South, 26° West, 350 feet distant. Surveyed By order of the Board of Supervisors, October 27th 1899 — S. L. Ward County Surveyor —
Marion Smith and Leo Warren Chairmen
and C. Cleaver Flagmans
SCALE:— 200 Feet = One Inch
Magnetic Variation, 13°30' East.
Length of Survey 7640 feet
Width of Proposed Road, 40 ft.
Average Elevation about
Sea Level — One Mile
N
S

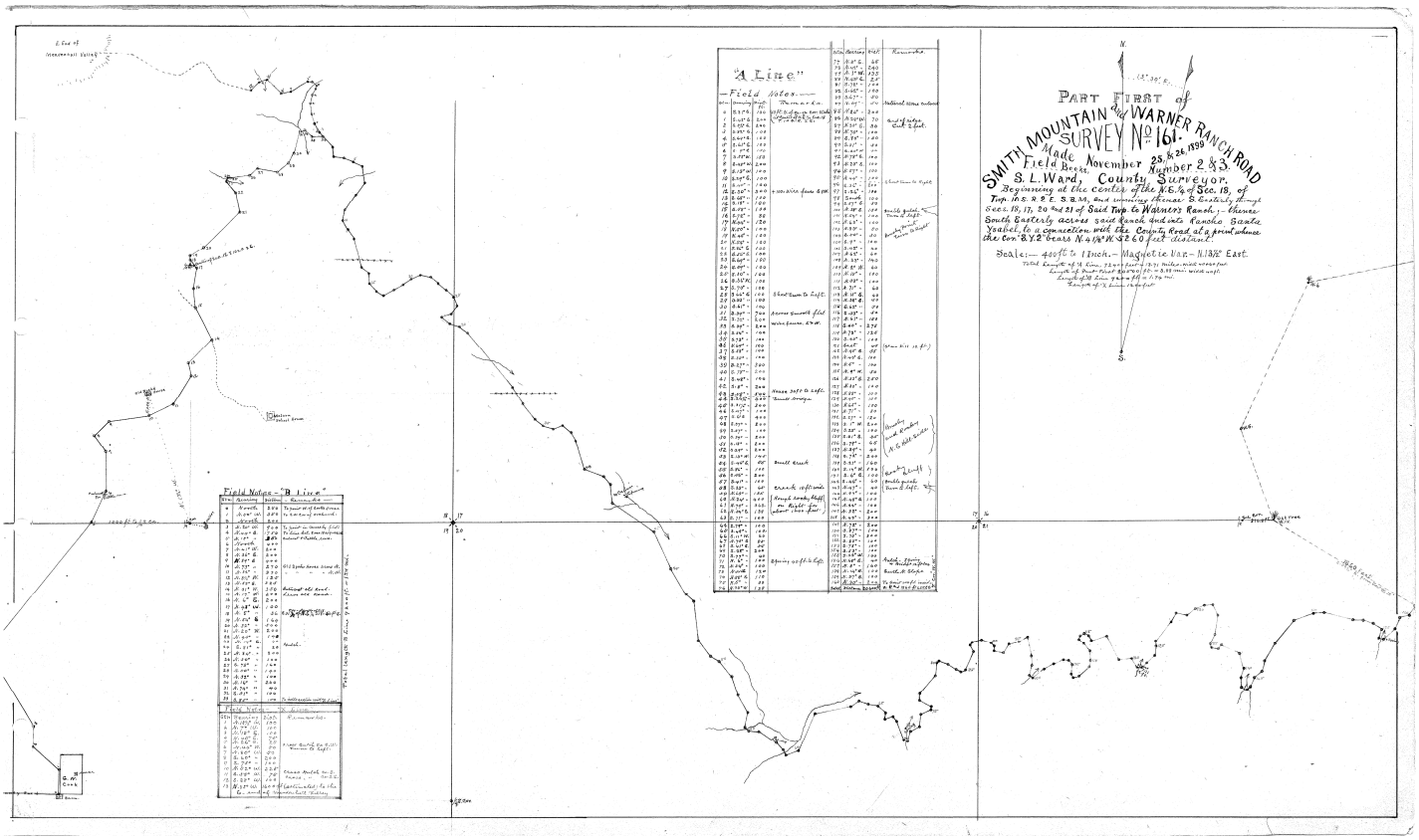
Right side of S. L. (Simon Lett?) Ward's October 1899 survey of a road route to extend the County road farther west to what is now the State Park [3]

On October 9, 1899, the Evening Tribune reported on the Nate Harrison Grade [150]:

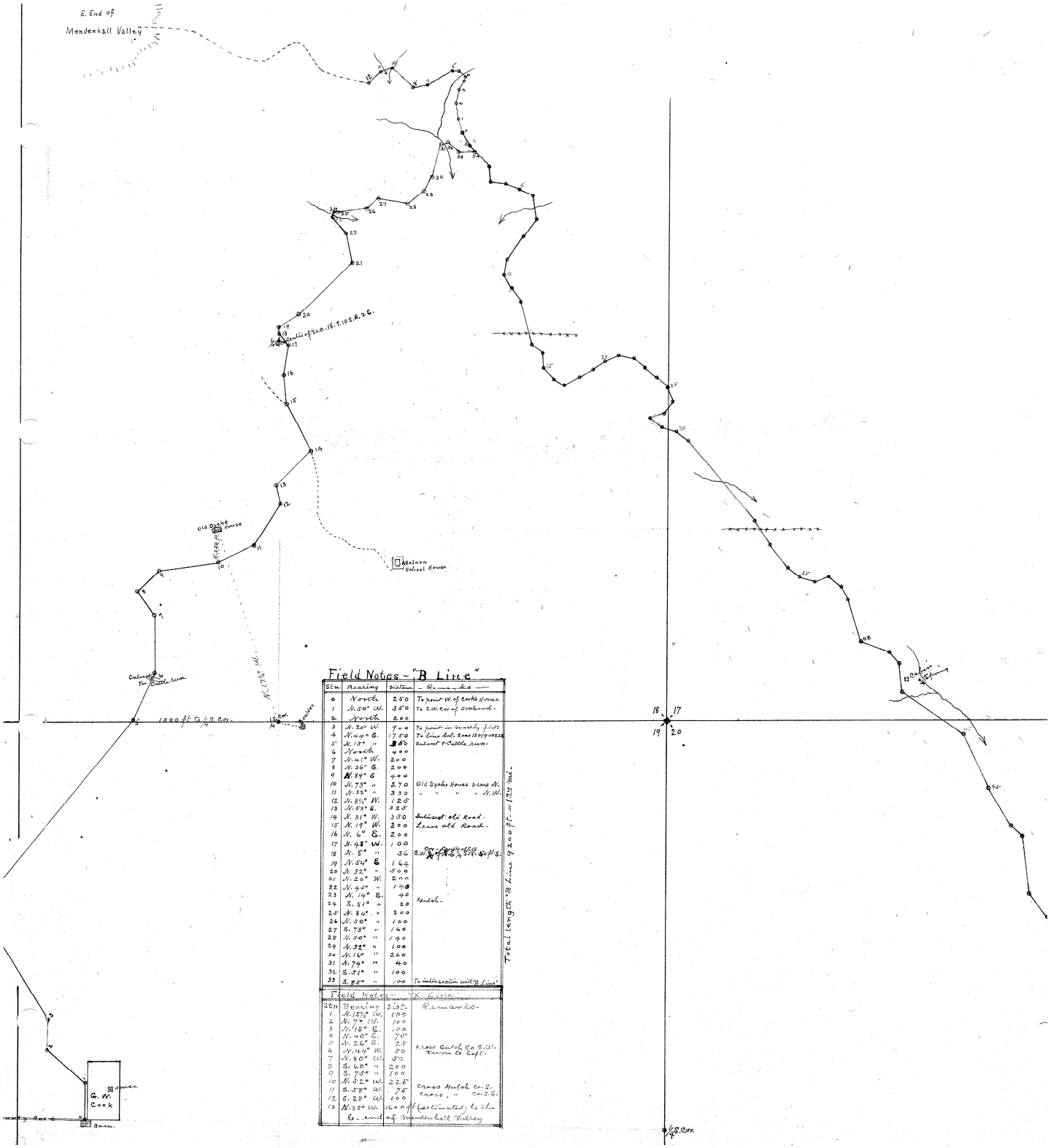
> Work has been commenced on a new grade up the Palomar mountain, and that part of the work in Supervisor Justice's district it is thought will be completed in six weeks. The residents on the mountain have contributed about $600 in work toward the building of the grade.

On October 12, 1899, the San Diego Weekly Union reported on the Restarick family camping trip of four months duration on Palomar, mentioning the Nate Harrison Grade [150]:

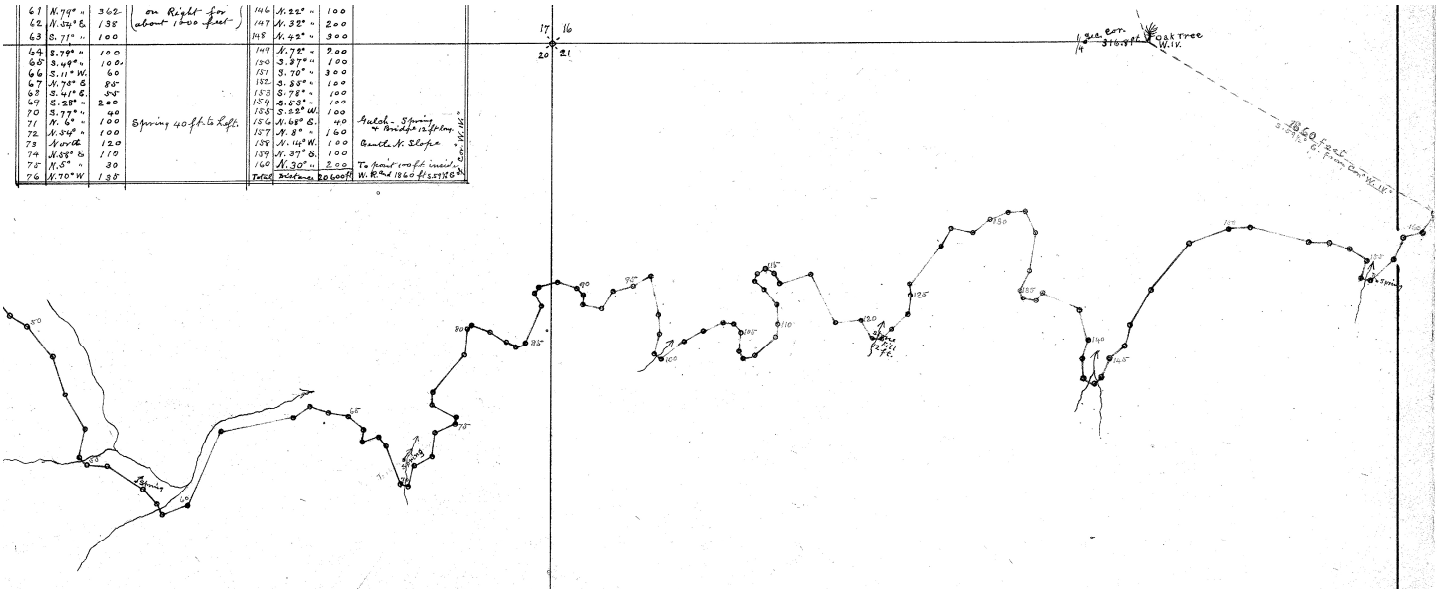
> A notable improvement being made on the mountain is a road being built toward Pala, the upper end passing by Clark's. The road is nine miles long, and the grade is only 10 per cent. The present grade is 30 per cent. The new road will stimulate travel up the mountain, it is thought, and will make the camping grounds more accessible.


"A Line"
Field Notes
PART FIRST of
SMITH MOUNTAIN and WARNER RANCH ROAD
SURVEY No. 161.
Made November 23 & 24, 1899
Field Book Number 283
S. L. Ward, County Surveyor.
Beginning at the center of the N.E. ¼ of Sec. 18, of Twp. 10 S. R. 1 E. S.B.M. and running thence S. Easterly through Secs. 19, 17, 20 and 21 of said Twp. to Warners Ranch; - thence South Easterly across said Ranch and into Rancho Santa Ysabel, to a connection with the County Road at a point whence the cor. S 1/2 bears N 49° W 52.0 feet distant.
Scale:— 440 ft. to 1 Inch.— Magnetic Var.— 11.3° East.
Field Notes "B Line"

S. L. (Simon Lett?) Ward's November 1899 survey of an eastern road route, starting at George Washington Cook's house in Dyche Valley on the lower left, then passing by the trail to the Malava school house, then eastward down Palomar Mountain, crossing Warner's Ranch to connect with the County Road in Rancho Santa Ysabel [3]



Left side of S. L. (Simon Lett?) Ward's November 1899 survey of an eastern road route, starting at George Washington Cook's house in Dyche Valley at lower left, then passing by the trail to the Malava school house, then eastward down Palomar Mountain, crossing Warner's Ranch to connect with the County Road in Rancho Santa Ysabel [3]



Right side of S. L. (Simon Lett?) Ward's November 1899 survey of an eastern road route, down Palomar Mountain and eastward, crossing Warner's Ranch to connect with the County Road in Rancho Santa Ysabel [3]

On January 1, 1900, the San Diego Union published an article on Palomar Mountain by Theodore Bailey which mentioned the status of roads [85]:

> NEW ROADS BEING BUILT
>
> Palomar is reached by a road on the east side, and another on the south, both very steep and rough. But during the present year a new one will be completed, starting from Warner ranch and ending on the Pauma grant. This will make a thoroughfare for travel from the western part of the county to the eastern. The grade will be light and the scenery grand from one end to the other.

On January 18, 1900, the San Diego Weekly Union reported on surveys for the East Grade [56]:

> LAST YEAR'S NEW ROADS
>
> SURVEYS MADE FOR SIXTEEN
>
> SMITH MOUNTAIN GRADE – THE MOST CROOKED IN THE COUNTY
>
> The Road Over Fifteen Miles Long …
>
> County Surveyor S.L. Ward has prepared an interesting table for the chamber of commerce, giving a list of the road surveys during the year 1899, their location, the distance in feet and in miles. Altogether there were twenty-one surveys for sixteen roads some of the surveys being for different

> portions of the same road. … The longest survey of the year was for the Smith mountain and Warner ranch road, a total distance of over fifteen miles. This survey was very difficult in places on account of the thick brush which stood fifteen and twenty feet high, and through which a roadway had to be cut before the survey could proceed. This new road will probably be the most crooked thoroughfare in the county. Down the mountain it follows a large canyon whose sides are cut by numberless small ravines, and the road's windings in and out of these ravines gives it a very zigzag course.
>
> The new road will have a grade of 7 per cent, and is designed to take the place of all the other Smith mountain roads, whose grades range all the way from 10 to 25 per cent. The trip up Smith mountain has always been a difficult one, but with the new road completed, it will have lost all its terrors. The upper end of the road begins near the east end of Mendenhall valley and comes down the mountain into what is known as the Rincon, on Warner's ranch. It crosses the ranch and enters Carrisita valley on the Santa Ysabel ranch, connecting with the main San Diego road. About five miles of the road are on the mountain, and this one-third will cost considerably more than the remaining ten miles across Warner's ranch. The work on the mountain part of the road is now being pushed, and it is the intention to have the entire road completed by this summer in order to accommodate the many campers who visit the top of the mountain annually. …

On March 8, 1900, the San Diego Union reported on a recent meeting of the San Diego County Board of Supervisors including an East Grade easement of road rights-of-way "From the Santa Ysabel Ranch company for the Smith Mountain and Carrisita road, a strip sixty feet wide and 6,200 feet long, situated in sections 29 and 30, township 11 south, range 3 east, and across a portion of the ranch known as Carrisita valley [56]."

On May 3, 1900, the San Diego Union published this, likely on the Nate Harrison Grade [57]:

> A new road up Smith mountain has some twenty-four men at work on it, and when completed will be a credit to its projectors and a delight to the traveling public, while the Palomar residents will appreciate it immensely.

On June 21, 1900, the San Diego Evening Tribune published this on the Nate Harrison Grade and East Grade [63]:

> Editor San Diego Tribune: -- Many letters of inquiries are received in regard to our new grade and how to get here so I will answer through your columns. There is a good force of men working on each end of the grade and they will have it passable in 10 days or by July 1st. It will be one of the finest and beautiful roads in this part of the state. We need it badly as the old grade is in bad condition. There is a stage line from Escondido here making regular

trips up each Wednesday and later in the week by special arrangements Wednesday, July 4th except that the stage will leave Escondido Tuesday, 3d instead of Wednesday, 4th.

On June 28, 1900, the San Diego Weekly Union reported on the Nate Harrison Grade and East Grade [58]:

THE ROAD UP PALOMAR

SUCCESS OF THE SUPERVISORS.

COMMISSIONER HALL WRITES OF THE GREAT IMPROVEMENT THERE.

Immense Amount of Work Accomplished, for Which Thanks Are Due to Messrs. Griffin and Justice.

There has not been in our county an undertaking of greater magnitude or of so far-reaching importance than the building of the new road up Palomar mountain. Formerly this portion of San Diego county, which is yearly becoming more famous for its fruits, immense belts of timber, pure mountain springs and streams, was reached by the perilous "slide down," by which the uninitiated was dropped one mile in little more than three, but by the time this comes to the eye of the reader there will be completed, in the preliminary stages, a magnificent two-horse wagon road at no point of which the grade will be more than 10 per cent, and much of it less than 5. Starting from the valley of the San Luis Rey near the Pauma Indian reservation, it gradually climbs and winds from peak to crest crossing back and forth a distance of thirteen and a half miles to make the ascent which brings you into the famed Adirondacks of California. At the summit looking down over one of the grandest panoramic views of mountain, mesa and ocean that America affords, the road looks like a golden thread, and looking up from the valley a team seems no larger than a fly on that thread.

The proposed route was the subject of much investigation and concern to Supervisors Griffin and Justice, in whose district the road is situated. Preliminary surveys were made, the experience of residents who had lived on the mountain a quarter of a century was solicited, and finally, about three months ago, accrual work was begun. It seemed, and truly was, a desperate undertaking. Hannibal it is said crossed the Alps, but with his limited knowledge of engineering he would have hesitated to climb where the supervisors have built a splendid road, upon which when completed, you can ride as safely and with as much comfort, as on National avenue. At the beginning of the perilous work there were places where a goat could hardly

keep a footing, and the horses, men, plows and graders were often upset and rolled down in a confused mass in the canyons. The work has been prosecuted to a point where the assurance is given that this naturally richest – agriculturally speaking – portion of our country can be made commercially available, and one can descend from its wealth of natural beauty without having to hitch a fifty-foot tree behind the vehicle to prevent being dashed to certain destruction.

The work was divided into two sections, one in each road district, Supervisor Griffin taking the lower five miles; Supervisor Justice the upper eight and a half miles. Two camps were established, Supervisor Griffin's, about two miles up from water; Supervisor Justice, midway, near the "Iron spring," where a water place will be established. The upper section has been kept strictly on grade, but in the lower, by reason of the fact that the supervisors were anxious to rush the preliminary work through, so tourists and campers could use the road immediately, there are some fills to be made to bring the work to grade. There are miles of rock cut on which tons of powder had to be used and on the lower section cuts through solid rock formation twenty-six feet deep in places. To think that work of this magnitude is being constructed at about $1 per rod, seems almost incredible. No contractor could be found who would touch the work for the price so the supervisors undertook it themselves. They selected the most competent men they could find to prosecute it, and success has crowned their united efforts.

If there are any who think the county money is misapplied, they should investigate the methods of conducting the work on Palomar mountain. If unbiased, they must conclude that no greater service for the limited outlay has ever been made in the county. If one rides over the smooth completed grade from Mesa Grande down to Warner's ranch, sees its substantial piles of rock work, stone culverts and archways, he will then comprehend what is contemplated in the finally completed work on the entire mountain system of roads, and what is being down by the united efforts of the Supervisors to aid the development of numerous portions of the county that are naturally rich in mineral and agricultural resources, that have either remained buried or undeveloped because practically unreached. If San Diego capitalists would catch a little of the spirit and practical energy of the supervisors and unite to build a railroad to the rich outlying sections that languish because of the lack of opportunity; the rich sections from Alpine to Julian, Ramona to Palomar, would gladly bring all their tribute to a city they would delight to honor, but which spurns their anxious desires. The supervisors' work in the mountains proves the magnitude of their designs, and the road ascending Palomar mountain is a progressive step in the interests of Southern California.
GEORGE P. HALL

After the Nate Harrison Grade was built which ran by his house, Nate Harrison would greet travelers on the road, who oftentimes used water from his spring and gave him gifts.

Nate Harrison at his spring on Nate Harrison Grade, c1910 Escondido History Center

Nate Harrison, 1918 Peter Brueggeman photo

By summer 1900, Theodore Bailey was running a stage line between Palomar Mountain and Escondido twice a week [84].

On July 12, 1900, the San Diego Weekly Union published this on the Nate Harrison Grade [59]:

> Our rancher friends who go to Smith mountain by the new road can reach it from Escondido by the Bear Valley road, and on arriving at Valley Center, which is a part of Bear valley, can take either the Pala road or the one up the new grade to Rincon, from which point the grade up the mountain is about two miles distant. Go up and see Messrs. Cleaver and Cook's apple orchards, and when at Buger's (Bougher's) take a look over the country from a point where the El Cajon mountain looks like a hole in the ground. Go up and get some wood ticks on you once again.

On August 2, 1900, the Record (National City) published an anonymous Palomar travel account including advice for ascending the southern Trujillo Road [86]:

> There is no good way to go to Palomar. The best is by Warner's ranch, it takes longer but is a good road. The next is the old grade while the one should not be tried at present. The mistake all make is to carry their own luggage when they can get it taken from San Diego to any place on the mountain for $1.25 per hundred pounds. If you go by the old grade call on Brown who lives at the foot of the four and a half miles. Brown will help

you up for a small fee and you will say you got more than your money's worth. As you approach the mountain ask for Brown, everybody knows him, when you see and know him you will be glad you came to Palomar. They used to say you could describe him by his whiskers but now they are gone. His hair is left to serve as a mark, and such soft, kinky golden hair the sunshine never gets tangled in it. He was our first regular mountaineer, and don't look to find a better, his smile is like a Christmas greeting which lasts all the year.

The Brown mentioned above was **Lindsay Anderson Brown** (1865-1944), a farm laborer, who lived with his family near the bottom of the Trujillo Road.

Crop of above 1896 photo showing a house alongside bottom of the Trujillo Road which is likely Linday Anderson Brown's house

On August 23, 1900, The Record newspaper of National City reported on a Palomar summer camping trip, mentioning the Nate Harrison Grade [207]:

> CHOLLAS VALLEY NOTES. … Fred Crosby, with his mother and sisters, arrived last Thursday at home after fifteen days outing, the objective point being Palomar or Smith mountain. … While on the fourteen-mile grade coming home, some of the harness on the Crosby horse gave way and the horse gave a sudden turn, upsetting the whole outfit. Though all hands were in a heap for the nonce, none were hurt but Fred, whose face was disfigured a little. All roads in fair condition, and Mrs. Crosby would have liked another month in camp.

On August 23, 1900, the San Diego Weekly Union reported on Palomar summer camping news, briefly mentioning the new Nate Harrison Grade [151]:

> The new grade up the mountain makes the ascent to the camps much more satisfactory than heretofore.

Palomar Mountain roads and dotted line trails on the 1903 U.S.G.S. Ramona map which was based on 1900 – 1901 surveying.

About the survey work to produce this U.S.G.S map, H.B. Restarick wrote in the San Diego Union in December 1900 [143]:

> … For months last summer men on this survey were doing work on Palomar mountain for a portion of the map which is to be made of Southern California. Such a map is much needed, for those at present in existence are full of inaccuracies. For example, in the present official map of this county, the road which for six years past has been traveled from Valley Center to the Rincon, is not shown at all. On this map, the only road shown to the top of Palomar mountain is from the Warner's ranch side. The grade used for nine years, leaving the Cuca grant and going north, is not on the map. …

On April 21, 1901, the San Diego Union published this on the Trujillo Road [60]:

> E.E. Shaffer and sons, Albert Travis and Albert Paine have returned from Smith mountain. Mr. Shaffer says the county road up the south side of Smith mountain is greatly improved.

On May 25, 1901, the Evening Tribune reported [152]:

> T.O. Bailey will again run his stage between Palomar Mountain and Escondido twice a week. As the seasons go by Palomar becomes more and more a favorite summer resort.

On June 12, 1901, the San Diego Union reported on the Nate Harrison Grade [153]:

> The new grade up Palomar mountain is being widened and otherwise improved.

On July 30, 1901, the Los Angeles Herald reported [92]:

> F.G. Thompson has established a regular stage line to Palomar.

On November 11, 1901, The Daily San-Diegan newspaper reported on an accident on the East Grade [208]:

> … But Smith mountain can grow other things besides quartz and mineral deposits, as is evidenced by a 6000-box apple crop, grown this season on the Cook ranch, which are of excellent quality. The crop is being handled through Fletcher Bros. of this city and is being shipped to Los Angeles via Temecula. In connection with the hauling there came very nearly being a serious accident recently. A big four-horse load was being taken down the steep grade on the Warner ranch side of the mountain, when the brake got out of order. The heavy wagon ran on the horses, which started on a dead run down the grade. Luckily, the wagon tipper over before going far, or the horses would probably have been killed. There were three men aboard, who managed to jump off and escape injury.

On July 8, 1902, the San Diego Evening Tribune reported on a San Diego County Board of Supervisors meeting including this item on the East Grade [61]:

> A petition was received and filed to have established and constructed in the fourth road district, the same being prayed for by Geo. W. Cook, J.M. Mack, et als., the general route being as follows: Beginning on the southwest quarter of the northwest quarter of section 9, leaving the county road north of John Mack's house; continuing in an easterly direction through section 9,

past the Palomar school house and the sawmill and south of the log cabin occupied by S.J. Mendenhall, through sections 9, 3, 11 and 12 all in township 10 south, range 1 east; then onto sections 18, township 10, range 2 east, S.B.M., to connect with the survey made by County Surveyor Ward. Said route having been viewed and decided to be the best place for a road by a committee appointed by the citizens of Smith mountain.

In his 1903 memoir, Robert Asher described moving to Palomar Mountain via bicycle from San Diego, travelling up the Trujillo Road [186]:

> … So then, on the last day of April, 1903, I, and my wheel (bicycle), -- with a big pack on the handle bars – were on the road north bound. Just at dark I reached the top of the grade between Escondido and Valley Center, so I made a little fire to heat water for tea, and soon after spread my blankets out on a level place some distance from the road and laid down my weary bones – and muscles to rest. Rest? Maybe for a few hours. Then I woke up. It was cold. Too cold. I put on trousers and coat. Still too cold. Mighty cold. It truly seemed as though daylight would never come. But it did. And I got up – got up to find the top blanket white as snow. There had been an extra heavy dew, and it had turned to frost. Not troubling to get a fire and breakfast, I got my blankets on the wheel again, with some grub in the pack and ten dollars in my pocket and reached the river – San Luis Rey – at 7 o'clock. There, on a sand bank, and in the welcome warmth of the sun, I got my first breakfast – day one – month one – year one --- After the great Break or otherwise 1st of May, Anno Domini 1903. Noon found me at the foot of the trail, or old road, near the Trujillo Ranch. I would have liked to have remained over night at that spot – it was so lovely – but the sky was overcast and threatening rain. So I started up-hill, pushing the loaded bicycle before me. There must have been over 60 or 70 pounds weight on the handle bars and it was no joke making the thing stay straight. I didn't get up anywhere near as fast as I had planned – and then came the fog – or rather, I got up into the fog. And it was a 'wet' fog – trees dripping like rain. And it began to turn dark. And kept getting darker and darker. I didn't relish the idea of staying out in the fog, yet I did not have the least idea how far I was from the top of the mountain. And pushing that wheel up-hill in the dark was not to be thought of. At that moment I happened to think of the little brush hut I had put up in lieu of a tent at the Iron Springs that first summer. So, gently laying down the bike, I got out my hand shears and proceeded to cut brush. It was pretty near too dark to see anything at all by the time I got through putting up the shelter, but I managed to get my blankets and myself under it in good order – and would you believe it – I slept like the proverbial log! Dry and warm and cozy as one could wish for. Next morning – Sunday – I reached Cleaver's about 9 o'clock. …

On July 1, 1903, the San Diego Union published this on the East Grade [65]:

LAID OUT BEAUTIFUL DRIVE

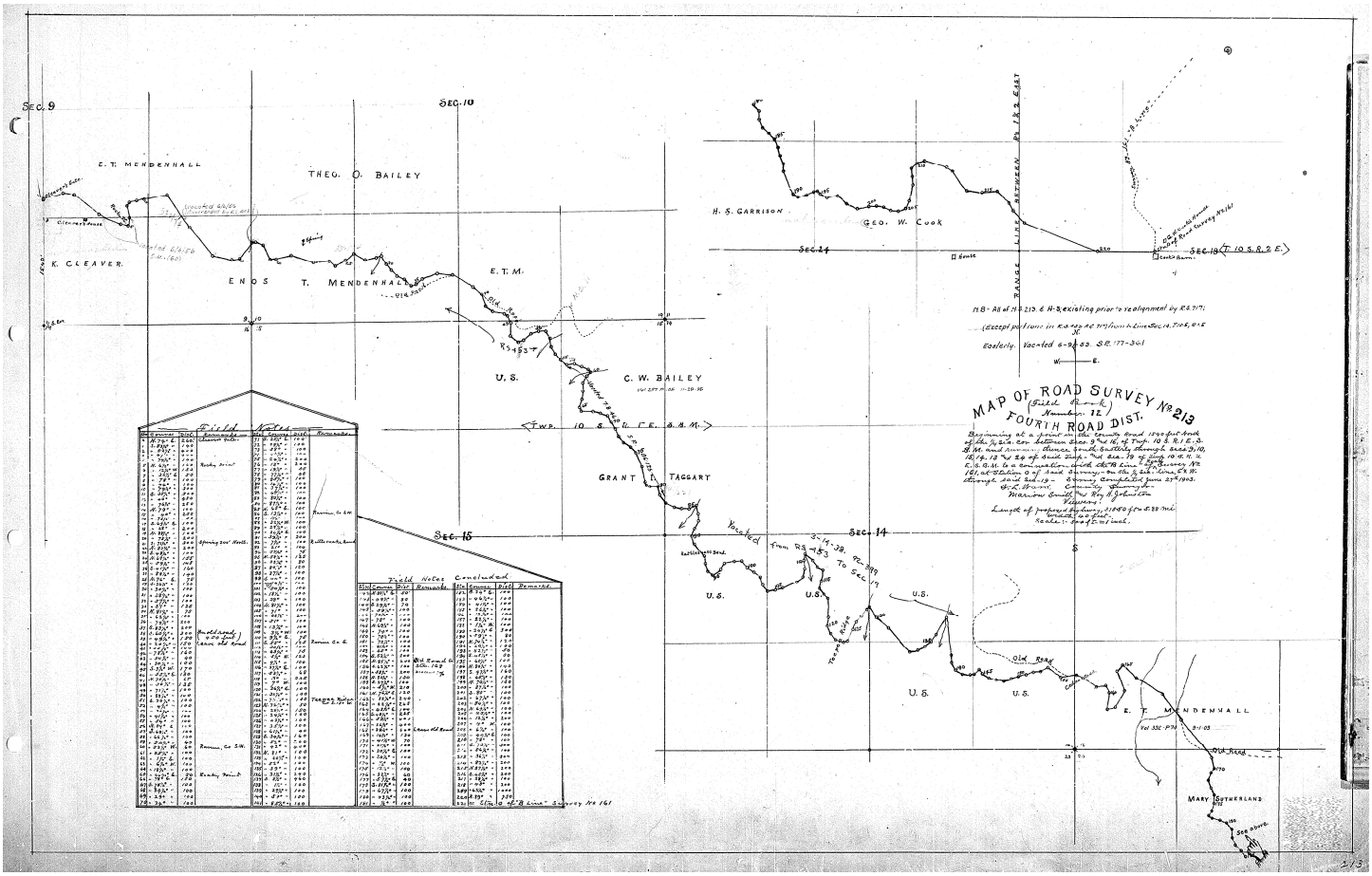
County Surveyor Ward Runs Lines for a Road on the Summit of Palomar Mountain

County Surveyor Ward has returned from Palomar mountain, where he has been for several weeks surveying a road that will skirt along the summit for several miles and connect with the grade that was constructed last year, leading down this side of the mountain to Warner's ranch. Mr. Ward believes that the new road will afford one of the most picturesque drives in all California. From it practically all of the country sweeping from the sea to the Cuyamaca mountains can be seen, and even the outlines of Point Loma can be made out. While the air is a little too hazy in the daytime to make out the city of San Diego, the electric lights can easily be seen at night. The elevation is about a mile above the sea, and the view down upon the hills and valleys, and towns and hamlets which dot the landscape, Mr. Ward describes as one of extraordinary grandeur. The view is practically unobstructed during the whole of the two-mile drive, except where the road passes here and there through the pine forest. Mr. Ward says that the cost of the road will be comparatively light, and that probably the greatest expense will be in removing the brush. There are no boulders along the route. A report of the survey will be presented at the next meeting of the board of supervisors. Mr. Ward also visited Warner's ranch and ran some lines for pipes from the springs. It is rumored that a sanitarium or mountain resort is to be built on the ranch by the owners.

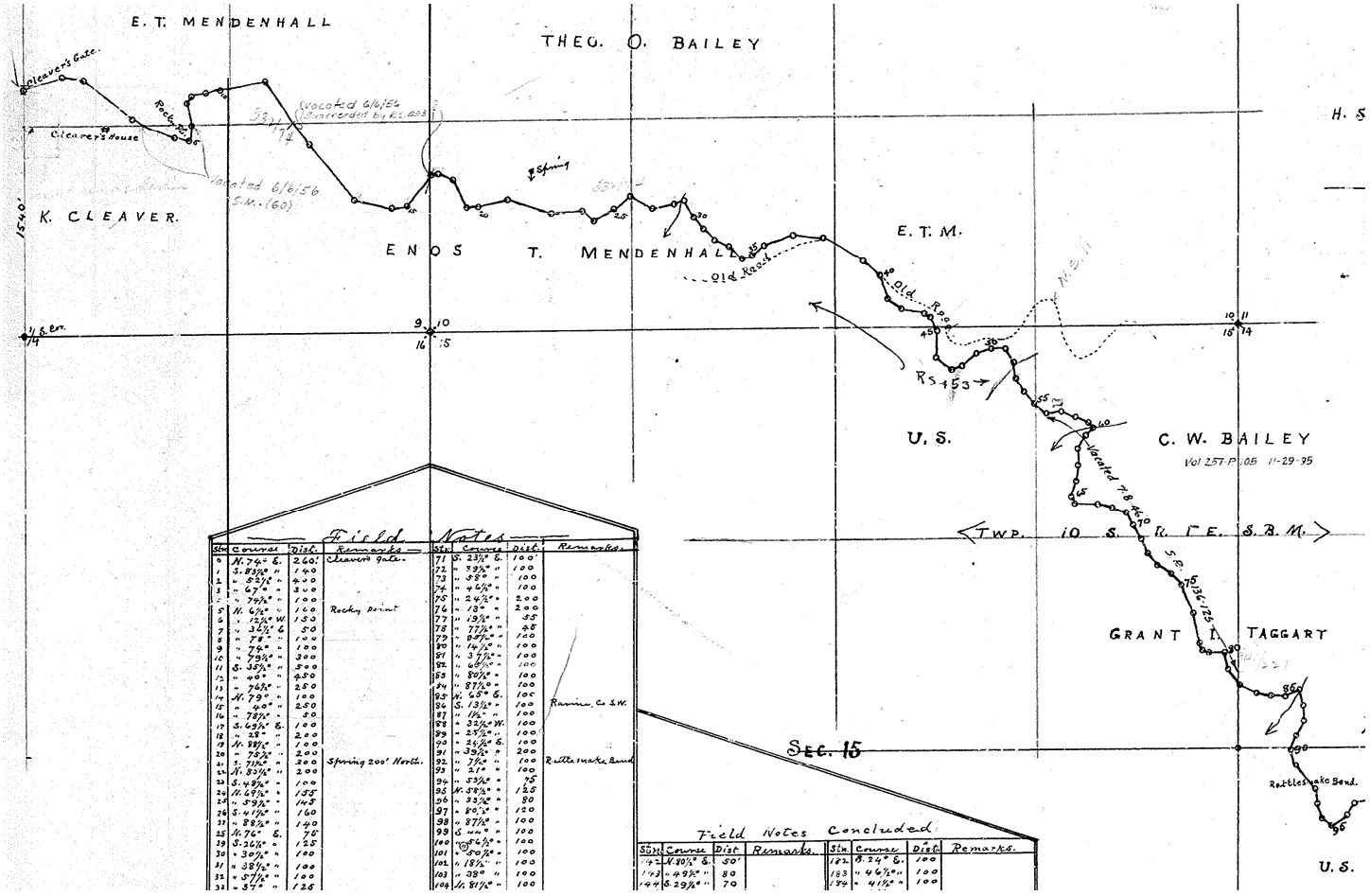
On August 6, 1903, the San Diego Union published this on the East Grade [66]:

MAP OF THE NEW SMITH MOUNTAIN ROAD

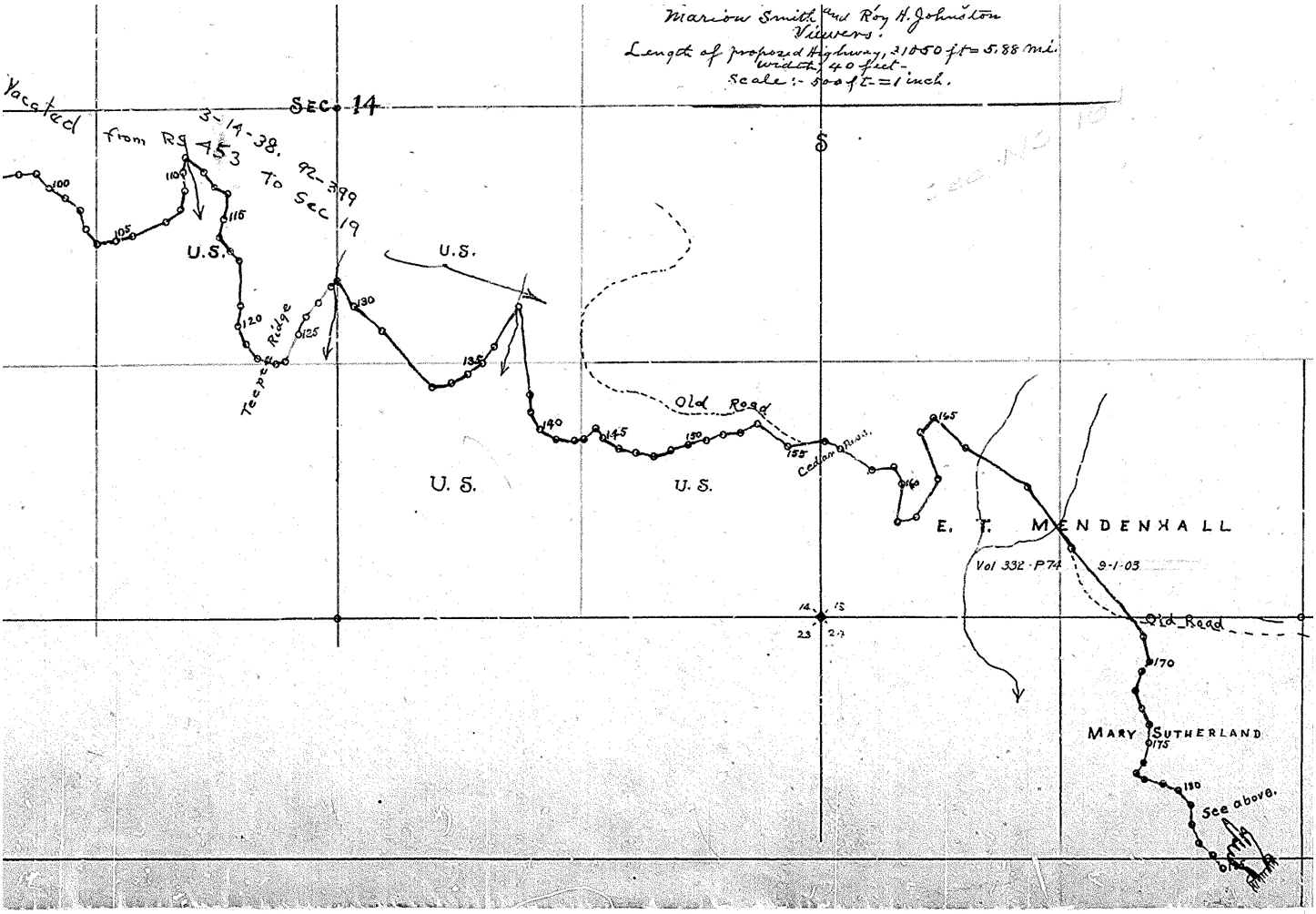
County Surveyor Ward is preparing a map of a new road he recently surveyed from the west end of Smith mountain, at the place where it taps the road to Escondido, to the east end thereof. It is in the fourth road district and will accommodate the people of the Nellie postoffice settlement. The new road resembles, on the map, a flash of crazy lightning, following as it does the configurations of the mountain in order to maintain a 2 per cent grade. The old road had a grade of 20 per cent. The surveying occupied ten days.



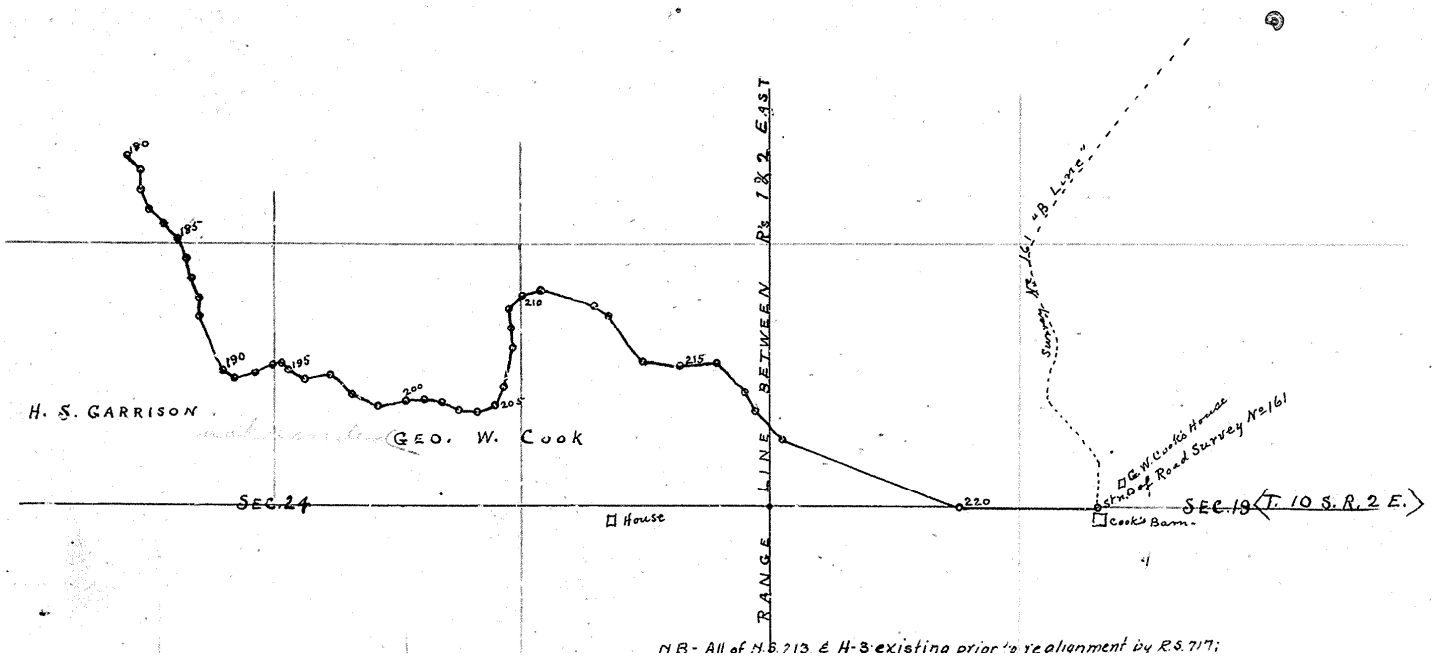
S.L. (Simon Lett?) Ward's June 1903 survey of a route 5.88 miles long starting from the County road at Clark Cleaver's gate at left (top of Nate Harrison Grade) and heading east to George Washington Cook's house. Sections of the older East Grade road are shown as dotted lines along the route [3].



Left section of S.L. (Simon Lett?) Ward's June 1903 survey, starting from the County road (Clark Cleaver's gate) at left and heading east. Sections of the older East Grade road are shown as dotted lines along the route [3].



Middle section of S.L. (Simon Lett?) Ward's June 1903 survey. Sections of the older East Grade road are shown as dotted lines along the route [3].



Right section of S.L. (Simon Lett?) Ward's June 1903 survey heading east to George Washington Cook's house. [3].

On August 6, 1903, the San Diego Evening Tribune reported on a San Diego County Board of Supervisors meeting including this item on the East Grade and the above survey [67]:

> The petition and viewers report in the matter of the application of G.W. Cook et al., for a road in the Fourth road district, being survey No. 213 and known as the Smith Mountain road, were received and filed and September 9th, 1903, at 10 a.m. was fixed as the date of hearing when all objections will be heard.

On September 10, 1903, the San Diego Weekly Union reported on a San Diego County Board of Supervisors meeting including this item on the East Grade [62]:

> The following matters of business are yet to be acted upon by the board, in addition to routine work: … Petition of George W. Cook and sixteen others for a public highway in the fourth district, over lands of S.J. Mendenhall and W.C. Tink (Fink), known as the Smith mountain road.

In June 1904, L. O. Johnston of San Pasqual Valley made the first automobile ascent of the Nate Harrison Grade [83]:

> L.O. Johnston made a successful trip to Palomar mountain last week with his big automobile. This is the first time that a horseless carriage ever went up the mountain grade and the passenger line between San Diego and the mountain camp grounds is assured. The trip was made from San Diego in six and a half hours, the usual time by team occupied about two days. Chas. Kleinhen acted as driver.

In summer 1904, Gordon Stuart travelled up Palomar Mountain and stayed in Pedley Valley for a month; he wrote about the Trujillo Road [107]:

> Up the Side of the Mountain
>
> Leaving Escondido, one summer day, Charlie Wattson and I started out for Palomar. The rig was two horses on a buckboard. Our load was not heavy. The drive up through the lemon and orange groves was very pleasant. At the north end of the valley we left the groves and went over the ridge into Valley Center. … That night we camped along the road. … Next morning we came to the foot of Palomar, on the south side. A road went from there to the top of the mountain. This road was three and a half miles in length. A new road up the north side of the mountain was twelve miles long. We walked all the way up the mountain, and the two horses had all they could pull; with the buckboard and our light load. Going back down the mountain, later, we cut a tree and tied it to the rear axle to keep the buckboard from running into the horses. …

On June 9, 1905, the Escondido Times published an item [94]:

> On Wednesday Granville Bros. began the first of their weekly trips from Escondido to Palomar. During June they make one trip per week, but during the month of July and August two round trips will be made each week. **Fred Blum** will be the driver.

On June 30, 1905, the Escondido Times published an article on Palomar Mountain including stage information [93]:

> … Granville Bros. now operate a stage line direct from San Diego and Escondido to Palomar Hotel. The stage leaves San Diego on Tuesday morning, reaches Escondido same evening, and leaves Escondido next morning in time to reach Palomar same day. Returning the stage leaves there on Thursday, reaching Escondido same day and San Diego the next afternoon. The fare is $5.00 for the round trip from San Diego and $3.50 from Escondido. It is the intention to run a semi-weekly stage line from Escondido to Palomar during July and August. …

In 1902, Bertrand R. Douglass (1868 - 1943) and his wife Lillie May Johnston Douglass (1874 - 1951) purchased 160 acres from Newton A. Clark for $1,000 at what is now the Silvercrest picnic area in Palomar Mountain State Park [78,79]. The Douglass' ran a summer resort, staying there during the summer, and off mountain during the winter. Known as Hotel Palomar, Bert and Lillie Douglass ran the resort along with Marion Smith (1863-1939), who ran a four-horse stage two trips a week to Escondido, which would bring customers to the resort. Taking the stage to Hotel Palomar on Palomar Mountain was quite a journey, since Palomar Mountain was rather distant from San Diego, given the means of travel at that time.

Frances Ryan interviewed **Fred Blum** who drove the Granville Bros. stage from San Diego to the Smith Douglass Hotel in the summers of 1905 and 1906. Ryan's notes say [76]:

> … Drove stage from San Diego to Smith Douglass Hotel summers 1905-06. Hotel built at Inspiration Point – where State picnic park is now. (2-3 miles west of Bailey's) Drove 6 team stage coach – black body –yellow wheels. 12 passengers. Two trips per week. Drove only during summers May – Oct. Leave SD 8AM – changed horses at Poway and ate lunch – Change horses at Escondido – Overnite in Valley Center at Jack Maxey's Hotel (in oaks where old store used to be). 8 hour trip to Escondido – 12 hours on up to Palomar. Nate (Harrison) was waiting on Billy Goat Point, watching for stage on stage days. Leave SD every Monday; arrive Palomar Tuesdays; returned to SD Wednesday. Second trip Thursday and Fridays; Return Saturday. Rest in SD Sundays. Water troughs along the way for horses to drink. Smith & Douglass Hotel built at place where big cedar tree is now fenced in. Many oaks…

Marion Smith family in front of Hotel Palomar, with colt Romeo, 14 July 1906.
Marion Smith was 43 years old. Daughter Margaret Laverna “Madge” Smith was 27 years old. Son Herbert M. Smith was 16 years old. Son Clarence M. Smith was 14 years old. Daughter Clara Smith was 12 years old.
Robert Asher photo

Palomar Stage at Asher's Lone Fir Trail. c1907 Robert Asher photo

Palomar stage, 1907 Robert Asher photo

Nate Harrison Grade with a horse drawn stage with a white top going downhill, c1907.

Robert Asher photo

A 1907 Palomar Mountain brochure described travelling by stage to Palomar and included two Palomar stage line advertisements, one by the Granville Brothers mentioned above [81].

HOW TO GET TO PALOMAR.

From Los Angeles, Escondido is reached by the Santa Fe, and from San Diego, either by the Santa Fe or by the Escondido stage. The stage leaves San Diego at 8 o'clock a. m., and reaches Escondido at 4 p. m. There is a picture in this booklet of the stage run to Palomar, by the San Diego stage line, during the summers of '05 and '06. The train reaches Escondido at 6 o'clock, and on Mondays and Wednesdays is met by the Palomar stage, which takes "aboard" all Palomar passengers, then goes by the San Diego stage office and completes the load. A pleasant ride of 1½ hours through orange groves of the Escondido Valley, and up the beautiful grade brings you to Valley Center, where Mrs. Jacoby has a good, hot supper awaiting you.

The next morning (Tuesday or Thursday), after breakfast, you again board the stage and start for Palomar. Lunch is eaten at "Uncle Nate's", half-way up the grade, and after an hour's rest under the big live oaks, the journey is resumed, and the top of the grade is reached in a couple of hours.

The stage ride is very interesting, and the trip is really not tiresome, on account of the many points of interest that the driver will point out. Every turn in the road brings into view some new interesting feature.

The famous Pala mines are in plain view, and also the Pala Mission.

The last 4 miles of the grade is through large trees, and the roaring of the Rain-Bow Falls is plainly heard.

The stage returns to Escondido on Wednesday and Friday.

We call your attention to the reduced stage rates from Escondido to Palomar.

Look over the advertisements in the back, for they are all of interest to any who expect to go to Palomar.

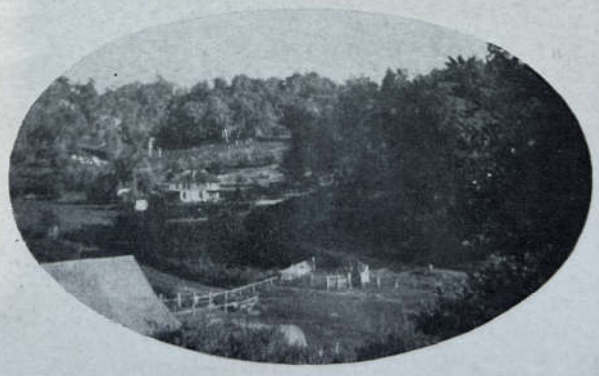
ACCOMMODATIONS.

There are two hotels on Palomar. The Palomar Hotel and Campo Contento. There are many beautiful spots for camping.

CAMPO CONTENTO.

Open June 15, '07.

Campo Contento (The camp of contentment) is the place to go to spend your summer vacation.



CAMPO CONTENTO

It is on the Bailey place, and is 5570 feet above the sea.

PALOMAR STAGE

STARTS JUNE 15

G. F. JACOBY
FRANK KLINE } Proprietors.

PERSONALLY CONDUCTED.
GOOD COMFORTABLE RIGS.

Stage leaves Escondido Mondays and Wednesdays, after arrival of train—6:15 p. m.

Leaves Palomar Wednesday and Friday mornings.

RATES

Escondido to Palomar - -	$4.00
Palomar to Escondido - -	2.00
Round Trip - - - - -	5.00

Fifty pounds of baggage allowed.

Excess of baggage, $1.00 per cwt.

Tickets for sale at J. L. Van Derveer's, Escondido.

Address Jacoby & Kline, at Valley Center, Cal., if wishing transportation before June 15.

San Diego & Escondido Stage Company.

Fare from San Diego to Escondido..... $1.00

25 lbs. of baggage allowed.

Over and above 25 lbs., 75c. per 100.

Fashion Stable, conducted by the company, at Escondido, Cal. Telephone, 513 Black. Information given about all points, especially Smith Mountains and Camp Grounds. Rigs to all parts of the country. We furnish drivers that are familiar with the country.

WE SOLICIT THE PATRONAGE OF THE TRAVELING PUBLIC

JNO. GRANVILLE, Prop.
E. GRANVILLE, Manager.

On May 4, 1906, the Escondido Times published an article about a back country trip undertaken by E.S. Swan in Fall 1905, which included a climb up Nate Harrison Grade [69]:

> "I took my team and outfit direct from San Diego for the entire round trip. The first day I drove to Escondido, remaining there two days…. "
>
> He drove from Escondido to Pala and took in the Indian fiesta, and from there drove to the heights of Palomar mountain.
>
> "The county has recently built a road over the peak. The climb is nine miles, as the road winds around hills and canyons with sharp curves. It was very hot, as the sun blazed away on the hillside. It was a hard pull of nearly six

hours for my horses, but oh, my! I was well paid for the climb! Near the top began the timber, immense pines, fir, spruce, cedar, etc., with vast acres of foliage and ferns that beat any I have ever seen, while the springs of pure water cannot be excelled. …”

Palomar Mountain buggy, 1906 San Diego History Center

On December 13, 1906, the San Diego Weekly Union reported on the East Grade [68]:

> PROPOSE NEW WAGON ROAD
>
> Supervisors May Build $6000 Highway from Palomar to Warner's
>
> A movement is on foot to petition the supervisors to build a wagon road from the east top of Palomar mountain to Warner's Ranch. The petition has been prepared and is being circulated. It is probable that it will be presented to the supervisors at the first meeting in January. The survey for the road was made by S.L. Ward some time ago and the route has been brushed out so that actual construction can begin at any time the supervisors order the work. The route planned is from the east top of Palomar mountain at the center of the northeast quarter of Section 18, township 10 south, range 2 E, thence running southwest [sic, should be southeast] through sections 18, 17 and 20. The rights of way have been secured. It is estimated that work will cost about $6000 of which it proposed to raise $3,000 by private subscription and the balance to be paid by the supervisors. It is proposed to complete the road by July 1, 1907.

In 1937, Catharine Wood wrote about the East Grade [1]:

> In 1908 [Ed Fletcher] ascended the original east grade in his two-cylinder Maxwell, which had to back up the steep pitches in order that the engine might receive enough gas. If the exhausted car had to use a little mule power in addition to its own horsepower in order to make the entire grade, what of it? Fletcher has been working for a good road up the east end ever since. …

On June 23, 1908, the San Diego Union reported on the East Grade [19]:

> WANT STAGE LINE BETWEEN RESORTS
>
> As Preliminary Step Citizens Will Petition Supervisors for Good Roads.
>
> Warner Springs, June 22. – As one of the preliminary steps for the establishment of an automobile or other stage line between here and Palomar mountain, a petition has been circulated and will soon be presented to the supervisors for the construction of a first-class highway between the two points, including the several miles of country between the springs and the head of the San Luis Rey valley. Those interested in the opening of the road include S.J. Mendenhall and sons, W.C. Frick, G.W. Cook, Bailey Bros, proprietors of the Palomar mountain resort; Clark Cleaver, Jas. Brazier (sic, Frazier) and Frazier sisters. It is stated that rights of way have been granted. The territory is in the third supervisorial district.

On August 11, 1908, the San Diego Union reported on two women hiking from Escondido to Palomar Mountain via the Trujillo Road [154]:

> Two intrepid young women of Escondido, Mrs. M.E. Ralston and Miss Marie Witte, made a walking tour to Palomar mountain, arriving at 4 o'clock Wednesday afternoon. Having left Escondido at 3:15 a.m. Tuesday they arrived at Valley Center postoffice at 8:45 and at the San Luis Rey river at 2:45 p.m. There they spent the night and reaching the foot of the grade at 8:30 the next morning made an easy ascent, arriving at Contento (Bailey's) hotel at 4 p.m. They carried 12 pounds of baggage and a stout staff apiece and declare the trip delightful from start to finish.

On September 12, 1910, the Evening Tribune reported on the first automobile ascent of Palomar Mountain by a woman, who drove up Nate Harrison Grade [155]:

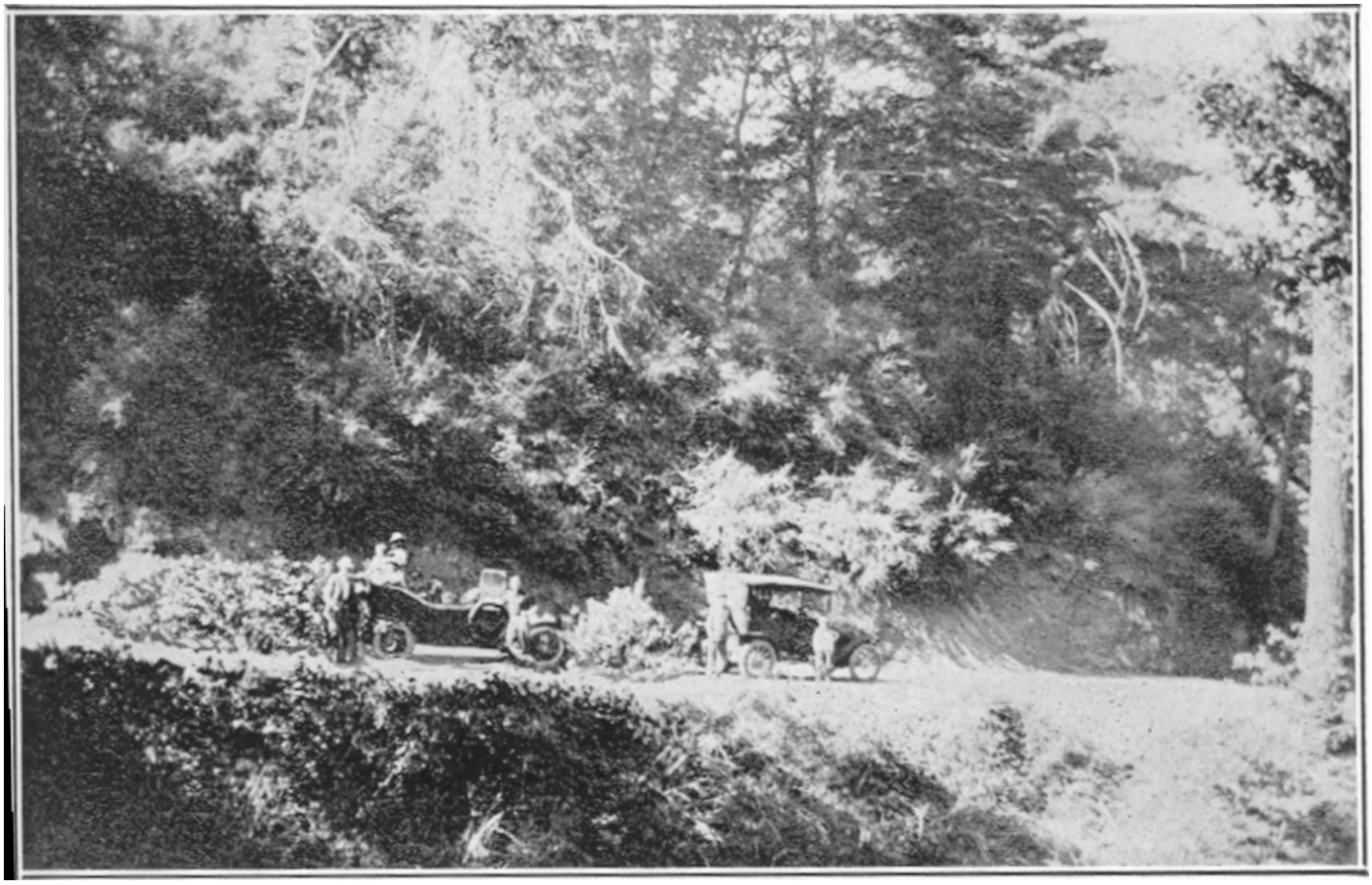
> MUCH NOTORIETY IS THRUST UPON DR. BESSIE PEERY
>
> Franklin Auto Co. Dilates on Her Ascent of Palomar Mountain in Car
>
> The last weekly bulletin sent out by the publicity department of the Franklin Automobile company of Syracuse, N.Y., contains the following relative to the recent feat of Dr. Bessie Peery of this city in climbing Palomar mountain:
>
> "Dr. Bessie Peery of San Diego, Cal., is the first woman driver to gain prestige as a mountain motorist by ascending Palomar mountain near her home city. She was accompanied by Miss June Peery. In her four-cylinder 18-horse power Franklin touring car, Dr. Peery made the nine miles of mountain road to the summit, 5,500 feet above sea level, in one hour and fifty minutes. The total distance from San Diego to the mountain and thence to the top, about 88 miles, was made in about six hours of running time. Dr. Peery had previously made other mountain climbs with her motor car and has driven over 4000 miles of the rough roads of San Diego county and the lower part of the state of California. The bringing of automobiles into that part of the country is said to have made accessible some of the most beautiful scenery in the world, heretofore difficult to reach because of lack of suitable means of travel."

Catharine Wood writes [1]:

> It was formerly the custom when descending the mountain to tie a tree to the back of the wagon to act as a brake. The first cars also followed this practice, but it was stopped by the Forest Service. Discarded trees at the foot of Nate

Harrison Grade supplied firewood for the Indians of the region for many years.

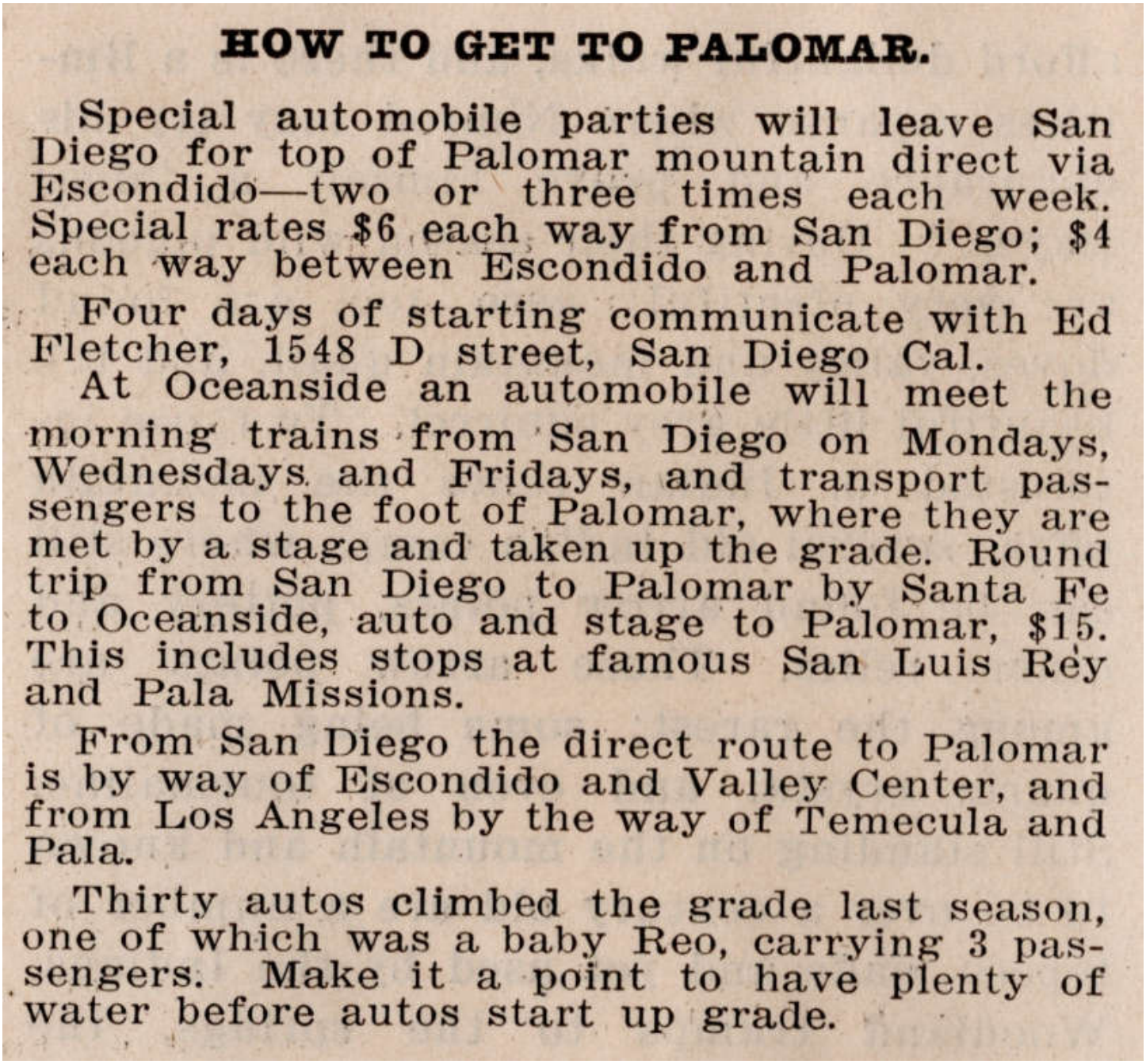
Nate Harrison Grade, c1910
Robert Asher photo



Trees tied behind cars serving as drag brakes, Nate Harrison Grade, 1912 [1]

Automobile with attached tree as a drag brake, Nate Harrison Grade, c1916 [30]

Wagon on Palomar Grade, October 1911 Ed Davis photo



HOW TO GET TO PALOMAR.

Special automobile parties will leave San Diego for top of Palomar mountain direct via Escondido—two or three times each week. Special rates $6 each way from San Diego; $4 each way between Escondido and Palomar.

Four days of starting communicate with Ed Fletcher, 1548 D street, San Diego Cal.

At Oceanside an automobile will meet the morning trains from San Diego on Mondays, Wednesdays and Fridays, and transport passengers to the foot of Palomar, where they are met by a stage and taken up the grade. Round trip from San Diego to Palomar by Santa Fe to Oceanside, auto and stage to Palomar, $15. This includes stops at famous San Luis Rey and Pala Missions.

From San Diego the direct route to Palomar is by way of Escondido and Valley Center, and from Los Angeles by the way of Temecula and Pala.

Thirty autos climbed the grade last season, one of which was a baby Reo, carrying 3 passengers. Make it a point to have plenty of water before autos start up grade.

From 1910 Bailey's Palomar Mountain brochure [81]

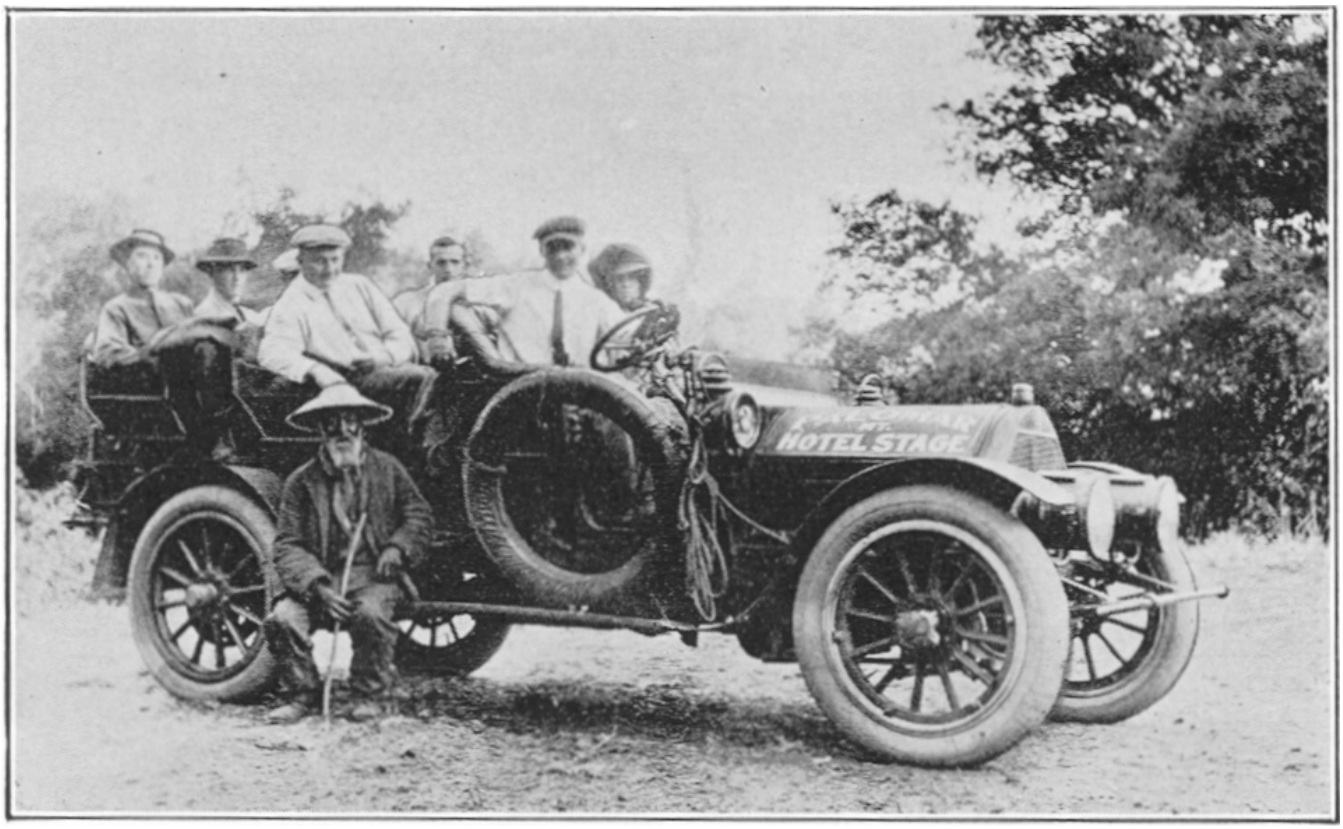
On June 23, 1911, the Escondido Weekly Times Advocate published [104]:

> Mr. Bailey has arranged for an automobile stage from San Diego via Oceanside and the San Luis Rey valley, through Pala, and also for a horse stage from Escondido leaving on Tuesdays and returning Wednesdays, the route being through Valley Center and the Rincon Indian reservation

Catharine Wood writes [1]:

> In the summer of 1912, Milton Bailey, then a student in dental college, started a two-car stage line between San Diego and the resort, fare six

> dollars and a half each way. He furnished one automobile and when he had more passengers than he could accommodate, he hired Abraham L. Clayburg to take the extra passengers up in his car. The new stage line proved popular at once. The trip was really an adventure, for one never knew just when the stages would break down. One day there were twenty-six passengers eager to take the trip. When the season closed with the approach of winter, Clayburg, realizing the future of the auto stage, started a stage line to Imperial Valley, using Milton Bailey's car and his own. A round trip took two days. His office was in the Pickwick Theatre building, Fourth Street between C and D (now Broadway) in San Diego. Thus began the well-known Pickwick Stages, which in 1930 were purchased by the Greyhound Lines.



First Palomar Stage. Nate Harrison sits on the running board [1] Milton Bailey photo

Catharine Wood writes [1]:

> Before long, summer passenger service to Palomar was started consisting of three laps, first by train to Oceanside, thence to the mountain by auto stage, where a horse-drawn stage carried visitors to the top. The fare from San Diego was ten dollars each way.

Visitors could travel from San Diego to Escondido by train, leaving at 3:00 pm and staying overnight [77]. Then visitors took a stage at 6:00 am to Rincon, rested an hour at Rincon, changed stages, and the stage went up Nate Harrison Grade, arriving on Palomar Mountain in the evening [77].

On June 14, 1912, the Fallbrook Enterprise published an 'Echos From Palomar' news column by James T. Van Renssaelaer, mentioning the first serious auto accident on the Nate Harrison Grade; the water trough mentioned was at Nate Harrison's place [115]:

> I went up with an auto truck last Thursday to help gather up the remains of an old Tourist which had gone over the cliff just out from the water trough. This was the first serious accident to an automobile since Palomar grade was built. During that time hundreds of cars have made this favorite run. However, Mr. McDowell, one of the assistant editors of the Los Angeles Times an old and experienced driver, tried to make time in the wrong place and his brake failing to work, over went his car on an almost perpendicular rocky slide of 150 feet. Mr. McDowell jumped out but his two passengers were thrown out ahead, the car passing over them in the air, only one being hit by a tire. They were severely bruised and cut up on the rocks. After three days under the reservation doctors care in Pala, they returned Los Angeles. With great difficulty we got out the engine, three tires and the hind axle. The thirteen miles from Pauma reservation to Nellie is wonderfully beautiful, the scenery being grand in places. I have made it a number of times and with ordinary care I don't consider it in any way dangerous. It must however be well understood by car owners that it is no place for fool drivers, for novices, for speeding or for old or small cars.

On July 30, 1912, the San Diego Union published [117]:

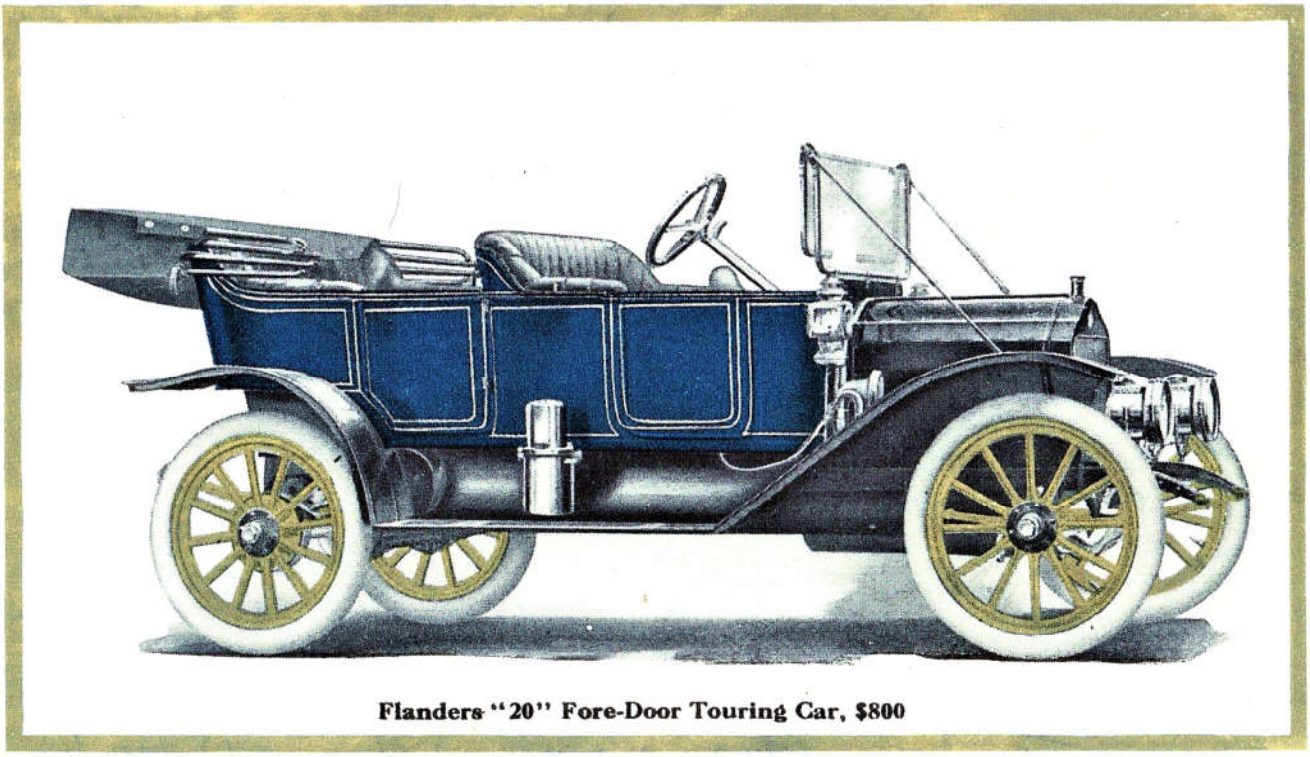
> NO SPEEDING ON PALOMAR
>
> The supervisors Saturday put the ban on racing for prizes by automobiles on Palomar mountain. At the request of E.J. Swayne, they had notifications sent to the constable of Palomar to arrest all motorists caught violating the speed laws.

On August 17, 1912, the San Diego Union reported on an automobile accident on the Nate Harrison Grade [116]:

> PLUNGES 300 FEET OVER LEDGE WITH AUTOMOBILE
>
> George Lambert Has Miraculous Escape From Death On Palomar Mountain
>
> LOSES CONTROL ON CURVE
>
> Accident Witnessed by Party Who Go to Rescue Of Victim
>
> Plunging over the grade at Hell's Corner, on Palomar mountain road, Thursday afternoon, and turning seven somersaults with an auto that fell 200

yards before it came to a halt at the bottom of a ravine, George Lambert, a rancher of Murrietta, about 48 years old, had a most miraculous escape from death. He fell more than 300 feet before being thrown from the car. As it was, he suffered a severe gash in the head and the fracture of several ribs. While at first it was feared that he had experienced dangerous internal injuries, it is now believed that he is absolutely out of danger. The accident was witnessed by Al Lambla of the Auto Service company, who was taking a party consisting of Mr. and Mrs. B. Blankenship and George Lawrence, all of Carthage, Mo., from this city to the hotel at the summit of Palomar mountain. They also were spectators of the thrilling accident.

The Lambla party were nearing Hell's Corner on the ascent when they came up with the car, a Flanders 20, containing Mr. and Mrs. Jacob Lambert, George Lambert, brother of Jacob, and Delbert, aged 10, and Lillian, aged 12, son and daughter of Mr. and Mrs. Jacob Lambert, all of Murietta. At this point all excepting George, who was driving, got out to walk, while he filled his tank at the spring. Turning to Lambla and his party, George Lambert in a jesting manner pointed to the turn in the road close ahead – the first turn after Tin Can Flat – and called out: "You can't make it; your wheel base is too wide; watch the little car do it." Thereupon he shot ahead at a swift clip and made the first turn without difficulty. Without slacking speed he made the curve and approached the second turn. As he did so he ran into the sand at the side of the road, lost control of his machine and went careening over the side of the grade, head foremost.



Flanders "20" Fore-Door Touring Car, $800

1912 Flanders 20

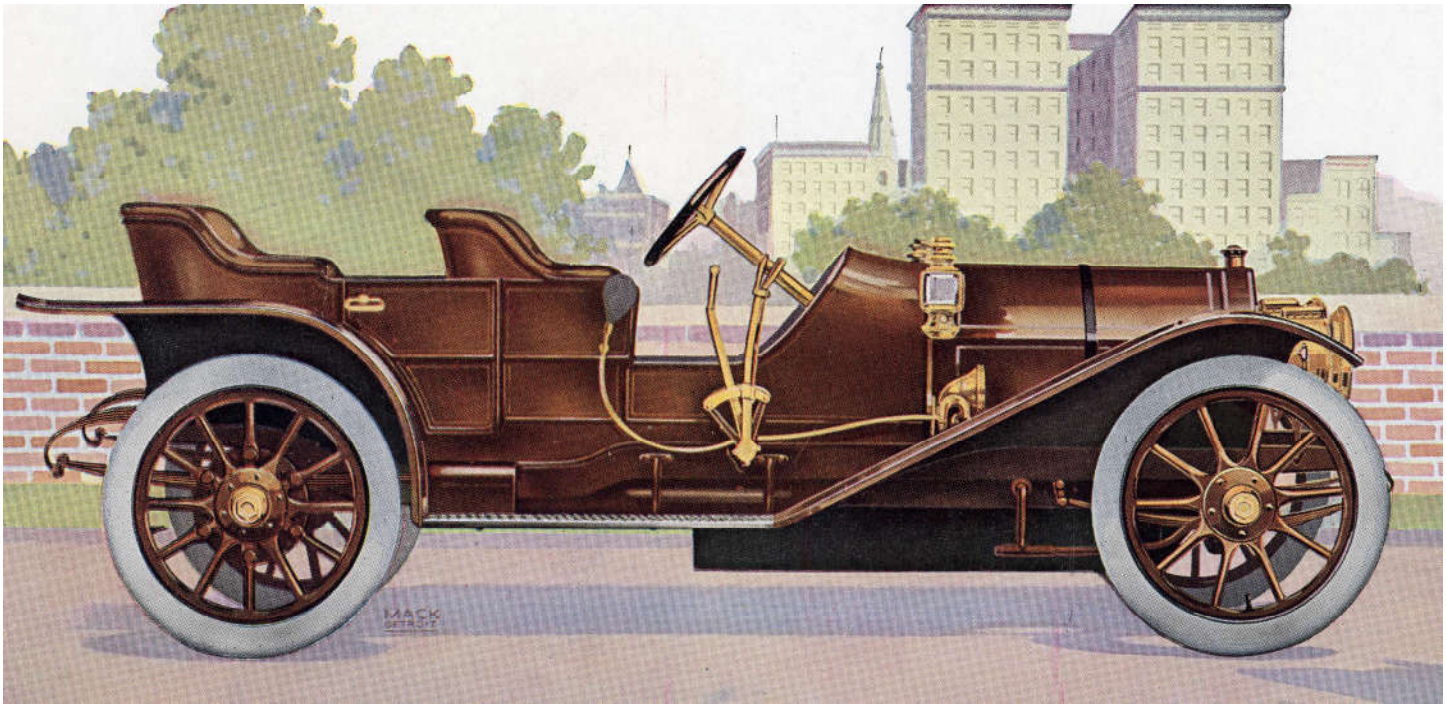
The first twenty feet is a sheer, perpendicular drop, and the machine went straight down for that distance. Then it began turning somersaults, and according to Lambla, who stood horror-stricken at the seemingly tragic accident, it must have turned over seven times before flinging out Lambert. After that it made four more complete revolutions, finally striking an outcrop of rocks near the foot of the descent and flying twenty-five feet further through the air before finally stopping. Lambla slid down the hill after Lambert. He kicked a hole through the floor of the machine, which had turned turtle, and running in his hand, felt a yielding mass, which first he took for the body of Lambert. On tugging at it and drawing it forth he found a pair of blankets. Looking about, he finally heard a moan, and proceeding in the direction of the sound discovered a leg and an arm projecting from a pile of earth, suit cases and blankets.

Boring underneath the mass with head and shoulders, Lambla finally got his shoulders under the injured man, and bearing upward lifted him into the open. Still keeping Lambert on his shoulders, he began the ascent of the mountain, climbing much of the way on his knees, supporting himself with one hand and holding Lambert's body across his shoulders with the other. It took him a full twenty minutes to get to within twenty feet of the top. Here he encountered the almost perpendicular wall, which afforded no support, the shrubbery having been torn away by the machine on its downward plunge. The Blankenships came to the rescue. Mr. Blankenship grasped a spoke of the rear wheel of their auto, which Lambla had brought up the road before beginning the descent, with one hand and extended the other to his wife, who, in turn, grasping his hand with her left, held in her right the top strap of the auto, which she dangled over the cliff in reach of Lambla, who was thus enabled to pull himself and his load over the edge of the road.

Lambert was unconscious, but Lambla restored him to consciousness by pouring water over his face and head, after which he placed him in the Auto Service car and took him up the road, overtaking the rest of the Lambert family on the way. Help was phoned for from Louis Salmons' hotel to Pala, whence the injured man was removed in an auto truck. Lambla heard at 10 o'clock next morning that the man was much improved and practically out of danger. The car was crushed with the exception of the motor. Lambert on being restored to consciousness, admitted that he was a rank amateur as a chauffeur, the Flanders, a new machine, being the first car he had ever driven. "I don't know just how it happened," he said. "I was started around the corner and was going too fast. I hit the sand and felt control of the wheel yanked out of my hands. I put on the brake, but I think it was after the car had started over the bank."

On March 22, 1913, the San Diego Sun reported on an automobile trip up the East Grade [70]:

> Fred C. Drew of San Bernardino in a 1910 Chalmers demi-tonneau car drove last Tuesday from Warner's Springs store up the east side of Palomar or Smith mountain to Mendenhall valley and returned to the Springs in one hour and 55 minutes, the distance being about 28 miles. The grade at times reaches a 38 per cent pitch.



1910 Chalmers-Detroit Motor Company Forty Pony Tonneau University of Michigan Library

On July 13, 1913, the San Diego Union reported on two stages to Palomar Mountain and the Nate Harrison Grade [72]:

> … This year (Milton Bailey) has replace the Shacht auto truck by a Pierce-Arrow, and is making tri-weekly runs to San Diego and return. … Whitney and Goss, the motor truck men of Oceanside, have purchased a specially constructed twelve-passenger Stanley steamer, and are running a daily stage from Oceanside. Special excursions are run on Tuesdays and Saturdays. On the latter days the round trip is $5.00. … Car owners will be glad to hear that Louis Salmons has put the grade in almost perfect condition. Another item of importance is the development of water at Tin Can Flats, about four miles up the grade. Taken slowly, with a car in good condition, the run up Palomar grade is one of the most enjoyable in the whole of California.

On July 27, 1913, the San Diego Union reported on Palomar Mountain news including the Nate Harrison Grade [187]:

> It should always be remembered that the Palomar grade is the most remarkable automobile run in the world, there being a rise of 4000 feet in nine miles. It is no place for a fool, or for a novice, and it should never be attempted in a car out of order. But for anyone who really knows how to drive and running a car in good repair, there is neither danger nor difficulty. As a man who has made the grade many times plainly puts it, "no man should, by rights, be allowed to drive any car, anywhere, who cannot make the Palomar grade, and no car should be allowed on the road that cannot make it without trouble." Go slowly; stop from time to time; cool your engine thoroughly at Tin Can Flats, and at Nigger Nates, and you won't have to grumble. The thirteen miles from the Frenchman's to Nellie have been made in thirty-nine minutes. They are frequently made under the hour. They ought never to be made under an hour and a half to two hours. The longer the better. Do not blame the grade if the fault is your own. It is now in almost perfect condition.

On August 9, 1913, the Oceanside Blade published a travel piece on Palomar Mountain by James Van Rensselaer which describes the Nate Harrison Grade [71]:

> The summer, up to the present, has been very quiet on Palomar Mountain, travel being unusually light to this most popular of resorts. … The grade, which rises 4000 feet in nine miles, is in really perfect condition for the first time in its history, and, coming down, I regretted to leave it for the inferior valley roads, the difference being very noticeable. There are now only two difficult corners, that knows as "Hell's," which is really very dangerous and "The Preacher's Corner," about a mile this side of Tin Can Flats, which ought to be leveled and properly graded. This corner takes its name from the Rev. Arthur Dodd for it was near here, on July 6th, 1911, he was found under a shrub in a state of moral and physical destitution, having attempted a walk from Pala to Nellie one very hot day. His condition that day reminded me of a story of an English clergyman who caught a small boy watching him nail up a sign. "What are you waiting for my boy," said the cleric. "Just to hear what a minister do say when he hits his thumb," replies the boy.
>
> I strongly advise the Blade readers to take advantage of the liberal excursion rates, from Oceanside to Silvercrest, now being made by Messrs. Whiney & Goss (sic, Whitney & Goss), for it will probably be a long time before this seventy-five mile trip can again be made for $5. I have a great love for the Palomar Grade, as I consider it the most unique anywhere to be found. I never refuse an opportunity of making the trip, and I have travelled up and down it at all hours of the day and night. I believe it has cost me four horses

> already and give it as my opinion that $10 the round trip is, if anything, too little to cover the expense of carrying a single passenger. If people could have seen us in the past struggling up the nine miles with ten or twelve horses or moving up gracefully on a six ton Alco, just a month ago they would realize what I mean. … My old friend Eli Jones tells me that Palomar Grade is no place for the Imperial. As I am interested in selling Buicks, Eli may be right about the Imperial, but taken as a general proposition any car in a good state of repair if driven slowly can make the grade with out injury. Eli is not often in the wrong, and since he completed "The Emporium," I look upon him as Oceanside's prominent citizen, but about Palomar Grade he is over-cautious. Get busy Eli, or the Buick agency will sell more cars than Emperor Eli. …

On August 11, 1913, the San Diego Union published Palomar news including this item about an automobile accident on Nate Harrison Grade [131]:

> Women Save Autoist in Accident
>
> An accident which might have been very serious but which took an amusing turn recently happened to Mr. and Mrs. W.D. Kuhlman of San Diego. Mr. and Mrs. Kuhlman, with Mrs. William Adams and the Misses Ella V. and B. Johnson, all of San Diego, were returning from Doane's valley over a road little traveled when an unhappy mixup of starting an engine, steering gear and lack of space caused their automobile to go over a bank at Horse Shoe bend. The car turned over twice and finally landed on Mr. Kuhlman. It being a small car the women were able to lift the machine and so release Mr. Kuhlman, who was not seriously injured.

Robert Asher writes about working on the East Grade and Nate Harrison Grade under county road foreman Bentley Henry Elmore (1860-1942) [23]:

> We will return now to the Cleaver Place and the fall of 1913. … Bentley Elmore bought the place in 1913. Mr. Elmore had charge of the county road on the mountain for a number of years. It had been the practice, ever since the West End Grade was built, to put in "run-offs" each fall as a final preparation for the winter's rains. Each spring, after danger of heavy winter rains had passed, the County Road Boss put on teams and road machinery at the foot of the grade and they worked up over the mountain and down the East End as far as the north line of Supervisor Joe Foster's district. Then back west and to the foot of the grade where they had started. Following this rough work would come a gang of Indians to take out the rocks left by the graders.

When Elmore took over, he followed precedent insofar as the machine work was concerned, but he decided that he could save the County money by raking out the rocks himself with perhaps one helper. I happened to be the helper. There was some scraper work west of the Nellie McQueen Place and we put in the first few days over there. Wednesday was hot and Thursday still hotter. That afternoon the big canteen which had been filled from the good Cleaver Spring went dry and we refilled it from a wayside stream. [PB: Nellie McQueen place was on the east grade]

By Friday night, we were both complaining of stomach aches. Saturday morning found us too sick to take any interest in breakfast, but there was still over a half-day's work near the McQueen Place, and Elmore had planned to begin raking out the rocks on the West End Grade early Monday morning. So we drove east once again that morning and by the middle of the afternoon the job was done, also Bentley Elmore and Bob Asher.

On the way back to the ranch, I told Elmore that I was too far done to even think of attempting any more road work for at least a week, or maybe even a month. Elmore admitted that he felt much the same but was sure we would both be feeling better by Monday. He declared that our illness was brought on by drinking water from the creek. That all we needed was a good day's rest.

But breakfast time Monday morning found us still feeling pretty shaky and far from fit. However, Elmore decided that we could at least stand the wagon ride down the West End Grade to the place he had selected for a camp at the Little Tin Can Flat. And if we felt too weak to attempt to put up the tent for the first night, we need put up no tent. However, by the time we reached Little Tin Can Flat, we were beginning to feel our oats -- beg pardon -- pancakes, and, after a short rest, put up the tent and made everything shipshape, and would you believe it, actually raked rocks for an hour or two before hitting the hay at dark. Elmore had appointed me to be chief cook and bottle-washer and himself as stable boy and hostler. He told me to get breakfast started real early each morning. We had been getting to work at the regulation time of 8 a.m., but now we were to knock off from our morning's work around ten o'clock, just about the time for old Sol to get really busy putting the heat on our West End Grade. We were to stay in camp until about 2 p.m., when, with a stiff west wind blowing, the heat would become more endurable. But the best-laid plans of mice and men....

Elmore's plan for getting an extra early morning start worked out fine -- but, well, the stiff west wind failed to materialize to any noticeable extent during the whole of the two weeks we were whacking the rocks off that grade. Each afternoon it simply became hotter and hotter until nearly knocking-off time.

The first afternoon came near proving too much for me, and Elmore was growling like a bear with a sore toe. Really, the heat was so trying that I don't know what would have happened to us if it hadn't been for neighbor William F. Hewlett.

Hewlett came along downgrade bound for Escondido for supplies quite early in the morning and stopped for a few minutes' chat with Elmore. Coming back up the grade the following afternoon, he again stopped.

"Hullo, boys," he called, "how'd you like a lemon or two? I picked up some in Escondido."

"Fine!" beamed Elmore. "Same here,' said I. "All right!" said Hewlett, jumping out of the buggy.

"Come and get 'me." There was a sack full of lemons lying in the back of the buggy. "There they are," smiled Hewlett, "half of them are yours."

I can't say that we actually took off our hats and hurrahed for Hewlett but I, for one, certainly felt that way. And the feeling persisted for the two hot weeks we were chivvying rocks off that twelve miles of grade. In the middle of each morning and middle of each afternoon, the two road workers sat themselves down in the shade of the wagon bed and treated themselves to a cool cup or two of sparkling lemonade. I am sure that it was due solely to those lemonades that we were able to stay with our job to the very end.

One day a lumber wagon came grinding down the road followed by billows of dust.

"That bird's got something more than brush hitched on behind," declared Elmore as the outfit drew near. "We'll have to put a stop to this sort of thing. They'll have the grade filled with rocks faster than we can rake 'me out."

As the rig came alongside Elmore held up his hand and ordered the driver to stop. As the team came to a halt, Elmore glanced behind the wagon.

"Just as I thought," he muttered in an aside to me. Turning to the driver, an old grey-haired chap, "Hey, you!" he stormed, "what do you mean by smashing down the banks and digging up the roadbed like that? You get right down and hustle that pesky snag out of the highway!"

The old man seemed to cringe under Elmore's very evident wrath. Two small children hove into sight above the sideboards behind the driver's seat.

"Hey, you!" again shouted Elmore, "can't you hear me? I say for you to get down and shove that snaggy old log over the bank clear off the grade!"

The old man seemed to be worried. "Please, mister," he pleaded, "Please let me go for just this one time. The brake's no good an' I just gotta have a tree hitched on behind. An' you see the grandchildren are with me."

"Oh, all right," capitulated Elmore. "You can have brush drag that won't hurt the road so much." Then he turned to me, "Lend me a hand, Mr. Asher, and we'll have the gentleman all fixed up in a jiffy!"

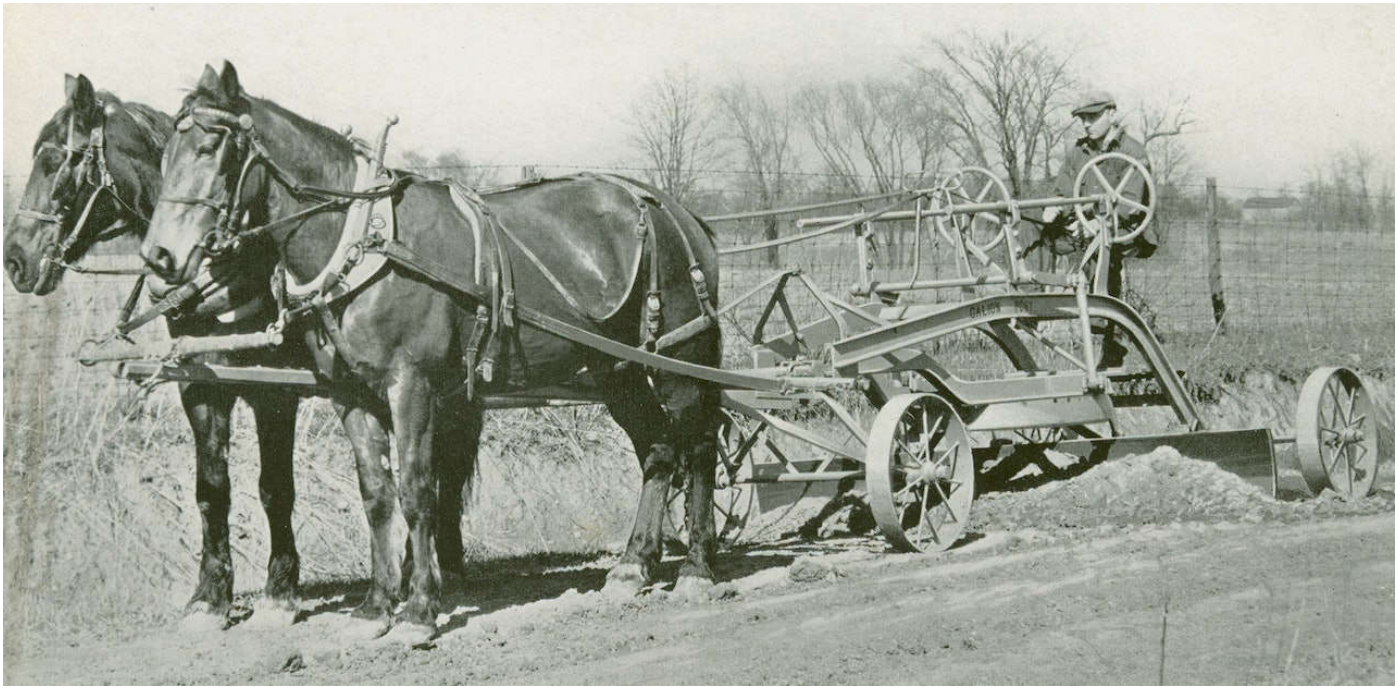
"But brush ain't no good!" protested the old man. "I told you my brakes ain't no good an' it takes something heavy to hold back a wagon as heavy as mine here. You let me go on with the tree an' I'll never come back to your old mountain again!"

"Fine! That's all right with me," countered Elmore, "but just the same that snag's got to come off! You just stay where you are, my friend, and we'll attend to it for you!"

"But I tell you ---" started the old man.

"Lend me a hand here, Mr. Asher!" interrupted my boss, repeating his previous order as he untied the rope from the tree. "Heave ho! Here she goes!" And over the bank went the snag.

Some months later, Mr. Elmore became interested in a two-horse grading machine he had been reading about. I was getting my mail at the post office two or three times a week and generally stopped in at Elmore's for a few minutes' chat. For weeks, pretty nearly the sole subject of Elmore's part in these chitchats was the new grading machine. He finally sent in a request to the supervisor of our district for a machine to be used on the Palomar Mountain road work. The supervisor couldn't see the need for new equipment at first, but Bentley Elmore kept right after Mr. Supervisor, and at long last got his machine.



Galion Pony Grader

I happened by the Elmore house the day after he had given the new machine a tryout. Elmore was bubbling over with enthusiasm. "I tell you, it's dandy," he exulted. "I'll be driving down the hill pretty soon; you can go along and see for yourself."

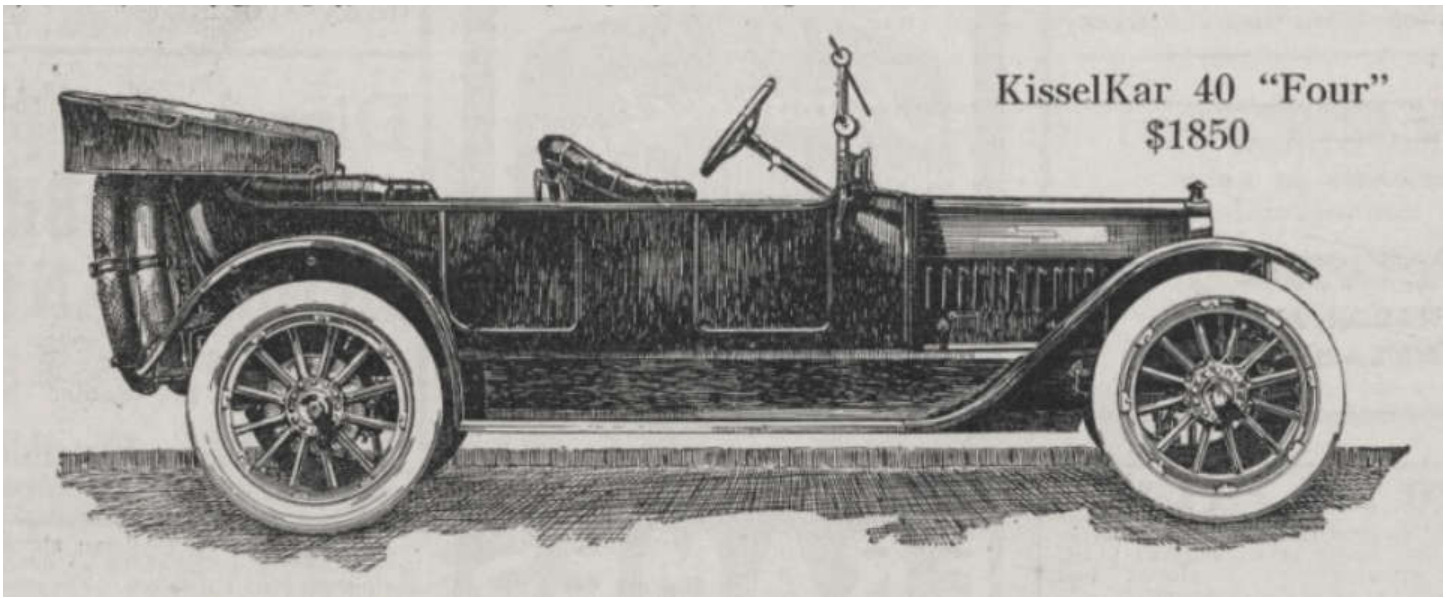
And I did, and it looked good. The ferns had been encroaching on the roadway some distance west of the Hayes place, and Elmore had run the grader over them nearly to the fence line. As we came out of the woods, Elmore remarked on the smooth work of the grader on the fern patch. At the same time, he pulled the horses clear out to the edge of the newly graded portion to show me how smooth it really was, and started them going at a pretty good pace for any dirt road. I happened to remember an oak tree stump that had been standing somewhere around in the ferns beside the road, and was on the point of inquiring about its fate when suddenly there came a tremendous jolt -- and -- before I could realize what was happening, I was flying through the super-ambient atmosphere high over the left front wheel. I landed on all fours, and went sliding and scraping half over the older part of the roadway. Elmore had stopped the team, and was about to climb down as I reached the wagon. "Hurt?" he inquired.

"Nope, only scraped my hands a bit."

"Gosh!" he exclaimed as he gathered up the reins. "I clean forgot the stump in that clump of ferns."

On May 31, 1914, the Oakland Tribune reported on an ascent of the South Grade or perhaps the East Grade [74]:

> KISSEL KAR TRAVELS SMITH MOUNTAIN ROAD
>
> E.G. Davies of San Diego, California, describes a trip in a KisselKar "40" seldom attempted by motorists. Running from San Diego to Palomar Davies proceeded over what is known as the Smith Mountain road. "The Smith Mountain road is scarcely more than a trail," says Davies. "It is extremely steep and tortuous and there are deep ruts nearly the entire distance. But from a scenic standpoint it is a glimpse of Paradise and well worth the trouble. After this trip I am confident that a KisselKar "40" will go anywhere with safety and certainty."



from a 1914 KisselKar ad
The Horseless Age, March 25, 1914, page 41

On August 1, 1914, the San Diego Sun reported on an ascent of Nate Harrison Grade followed by a descent of East Grade [73]:

> METZ CAR MAKES A DARING TRIP
>
> G.H. Metz of the Metz Motor Car Co., discussing mountain trips, said today: "I am often asked by Southern California motorists if there is a new and desirable mountain run as a week-end trip. As a matter of fact there are not many new ones, but there are a number of beautiful old ones which some of our Southern California motorists do not know about. One of these which hitherto has not been so easy of access is the pine-clad summit of Palomar mountain, in the back country of San Diego county. With the new boulevard through San Luis Rey canyon leading right to the foot of Palomar grade, the climb over the regular road to the summit at 6000 feet elevation, is a trip full of joy to those who seek the unusual in motoring trips.
>
> That is the regular way to go, but there is a real 'thriller' connected with the trip for those who have a touch of adventure in their blood, and that is the 'back-door stairway' down the east slope of Palomar mountain to Warner's ranch. My advice is, 'don't go down that way' unless you have the greatest confidence in your car, and yourself as a mountain driver. Up to date, I believe, only one car has succeeded in negotiating the entire trip on its own power, though some others have done it by mule power when they got part way up and could not get any farther, and didn't dare go back.
>
> On June 28, H.W. Stone, Metz agent of San Diego, with Mr. Cox, a Metz owner as driver, drove a Metz roadster from Warner's ranch clear up to the very top of the Palomar toboggan grade. It really did not seem possible, but Mr. Stone took one of his friends, Mr. Wm. P. Creswell, Reo agent of San Diego, with him, and now Mr. Creswell is the biggest kind of a booster for the sturdy little Metz. That is the kind of good sportsman blood that so happily characterizes Southern California automobile dealers. Let everyone take off their hats to a good clean winner, even though it is to a competitor. If some of my California friends take the regular road to Palomar mountain, don't come down until you at least go to see the 'back-door stairway' or toboggan chute down the east slope, then think of the car that can come up such a grade when it even makes your heart beat faster to look down the fearsome slide to the valley nearly a mile below in direct elevation.

1914 Metz roadster

rmsothebys.com/auctions/hf19/lots/r0053-1914-metz-model-22-roadster

Palomar Mountain road, 1914 San Diego History Center

On December 31, 1915, the San Diego Sun reported on a motorcycle ascent of the East Grade [75]:

> SOME TRIP
>
> Cletto Bruschi of the local Harley-Davidson motorcycle agency reports on a trip made by the 1916 model that conclusively demonstrates its power and reliability. Bruschi and Leslie O'Berg, each weighing about 165 pounds, Sunday made the trip up the "slide" on the back of Palomar mountain, with a Harley and side car.

1916 Harley-Davidson with sidecar
www.yesterdays.nl/product/harley-davidson-1916-combination-1000cc-2-cyl-ioe-2703

On February 15, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade and the East Grade [191]:

> Road Overseer, B.H. Elmore, accompanied by W.F. Hewlett made a trip of inspection, horseback, down the west end of Palomar grade preparatory to beginning work. He has been working this week on the east end road, with two teams and five helpers, and finishes opening the road to travel, today. He will begin work on the west end grade, Monday, Feb. 14. The damage here is greater than on the east end, and includes several serious washouts that can only be remedied by bridging, several minor ones, and upwards of 135 slides, some of them 75 feet long.

On February 15, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade [192]:

> Road Overseer B.H. Elmore, with his force of assistants, increased by the addition of N.H. Hargrave and team, has made rapid progress in opening the roads to travel. The bridge over the first big washout on the west end, is completed and the chasm made passable. A few days, if weather permits work, will see the second and last in like repair. Over ten miles of road will then be fit for wagon travel.

On March 2, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade [193]:

> The rain of the past three days has delayed progress of the roadwork, but the grade is now in fairly good shape as far down as the “Saddle” or “Divide,” making about thirteen miles of road open for travel. Road Overseer Elmore plans to set up camp this week at Nate’s Ranch. Mrs. N.H. Hargrave will accompany the road-workers and furnish them board while in camp.

On March 8, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade [194]:

> Mr. B.H. Elmore made a horseback trip to Pala on Thursday and reports a shocking condition of the roads, in some places there being no road left by the rushing waters. The grade on the west slope is in a deplorable shape, being filled with slides that render it almost impassable even for horsemen. On that part of the road that has been hastily put in partial repair, slides continue to fall, necessitating repeated clearing away before a team and wagon can pass.

Work crew on the Nate Harrison Grade, undated
Frances Beven Ryan Papers, Escondido Public Library

On March 23, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade [195]:

> Road Overseer B.H. Elmore and helpers have completed a rough passage-way down the grade, and it is now possible for two horse teams to travel over it, if carefully driven.

On March 29, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade [196]:

> Mr. and Mrs. Nathan Hargrave returned from Valley Center Sunday morning. Finding Palomar grade impassable in places and having to shovel their way through, delayed them so that they were forced to camp Saturday night below Nate's, completing the trip Sunday morning. They had an 1100 pound load and the roadway being so narrow, careful driving was needed to avoid accident.

On April 7, 1916, the Weekly Times-Advocate of Escondido reported on the Nate Harrson Grade [197]:

> Louis S. Salmons, with a four-horse team and two tons of live pork, made his way down the grade on Thursday. He was preceded by B.H. Elmore and W.F. Hewlett, who with picks and shovels worked until 6:30 p.m. getting him through. …

On June 22, 1916, the Daily Times-Advocate of Escondido reported on the Nate Harrson Grade [198]:

> Road Overseer B.H. Elmore, and L.S. Salmons are completing the repair work on Palomar grade which will put it in good shape for summer travel.

On July 28, 1916, the Weekly Times-Advocate of Escondido reported on an accident at the top of Nate Harrison Grade near Silvercrest [199]:

> J.N. Haskell and three children narrowly escaped injury on Sunday morning when in turning out to avoid a patch of sand, the right wheel hub of their Ford struck a partially concealed stump by the side of the road near Silvercrest. The car was thrown on its side, the raised top preventing its complete overturn. The wheel was smashed into kindling wood and the axle badly bent, but the occupants of the machine were fortunately unhurt.

Catharine Wood wrote about the Trujillo Road [1]:

> When no longer used as a road, the 1891 south slide became the "mail trail" up which the mail was brought several times a week on horseback, but the carrier walked up the steep parts.

Mail carrier Peter Jolley showing how to walk uphill on the South Slide 'mail trail' holding the horse's tail, c1918 Robert Asher photo

Catharine Wood wrote about the East Grade [1]:

> A few years before (1925), one resourceful young woman coaxed a gasping Ford over a renowned steep pitch with a sharp turn at the end by blowing in the gas tank to increase the pressure while the driver worked feverishly with feet and hands to pilot the car.

On October 5, 1916, the San Diego Union reported on the East Grade [132]:

> ROAD TO PALOMAR'S TOP UNDER CONSTRUCTION
>
> JULIAN, Oct. 4. – Construction of a road up the east side of Palomar mountain to connect with the road through the west side of the Warner ranch to the thoroughfare to Santa Ysabel and Julian under consideration for many years, has started, a crew of men, under direction of Supervisor Foster, being at work at the Warner ranch end of the long grade. The survey made by County Surveyor Butler calls for a road to the top of the mountain. The first three and one-half miles of the road is within the boundaries of the third supervisorial district and the remainder in the fifth district. The survey calls for a road of not over a 5 per cent grade at any point. When completed the road will be one of the most picturesque drives in the county. The present force at work on the construction will be doubled the present week and it is expected that the section within the third district will be completed before the rainy season.

On March 9, 1917, the Weekly Times-Advocate of Escondido reported on the Nate Harrison Grade [200]:

> Messrs. O.L. Williams, B.H. Elmore and Goodson, of Bonsall, with four-horse team, have spent three days doing repair work on Palomar grade, removing slides and fallen trees, filling in and widening. They went over the entire length from the foot to L.S. Salmons' (Salmons' Woodwardia house was on the east side of Palomar Mountain), and the road is now open to wagon travel.

On November 28, 1917, the Daily Times-Advocate of Escondido reported on an accident on the Nate Harrison Grade [189]:

> PALOMAR, Nov. 27. – What might have easily been a very serious accident occurred Saturday, when a Mr. Lockwood, of Santa Ana, with a party of friends, bound on a vacation trip, were ascending Palomar grade. On one of the steep pitches just above the "W," the car, a Stanley Steamer, stalled, and the brakes failing to hold, the machine began slipping down hill faster and faster. Finding he could not stop its backward progress, Mr. Lockwood steered it into the bank. The speed had become so great that the impact threw the car over on its side. Fortunately, the occupants were unhurt, and, not to be cheated out of their anticipated outing, two of the party walked back down to the Pauma ranch and secured a team and driver, who towed the automobile up the grade and into camp on the old Oliver place. Some damage to the steam pipes of the car necessitated sending for a special repair tool. When it arrives by mail, Mr. Lockwood expects to put the car in shape

for the return trip, which may be somewhat delayed beyond the original plans.

On May 17, 1918, the "Palomar Paragraphs" column in the Daily Times-Advocate of Escondido reported on an accident on Nate Harrison Grade and its road condition [190]:

> When ascending Palomar grade on Thursday, with a well-loaded Ford, J.P. Roberts (Jack Planwydd Roberts) stripped the gears when a short distance above the "M Turn," and the brake being thus put out of commission, the car began a rapid backward descent. Roberts steered it towards the bank, encountering a rock which turned the machine over. He struck on his shoulder, and the force of the fall rendered him unconscious for a time. He awakened to find his dog licking his face and a barrel churn on top of him, the latter being a situation requiring several seconds for this dazed faculties to understand. Finding his injuries were no more than a lamed shoulder, he walked up to the home off his father-in-law, A.G. Hayes, on the former Hewlett ranch, returning with Mr. Hayes to the scene of the accident, next day. Besides the stripped gears, one rear wheel was a wreck. Mr. Hayes left on Saturday for Elsinore, where he will arrange for repairs, leaving the car on the grade for the present.
>
> Palomar grade is badly in need of repair work, but $15 having been expended upon it since January 1. There is increasing travel, and the rocks with which it is thickly strewn are very hard on auto tires, besides making the ascent unnecessarily difficult for teams, and there is much m- plant (printing error). It is hoped Supervisor Westfall will soon put it in an improved condition for the summer traffic.

On October 4, 1918, the Daily Times-Advocate of Escondido reported on the Palomar apple crop including the use of the East Grade [185]:

> LARGER APPLE CROP ON PALOMAR MT. THIS YEAR
>
> PALOMAR, Oct. 1. – The crop of apples on Palomar mountain is the largest in years. It is said to have been sold and that for the first time in a number of years the shipments are to be made down the east side of the mountain, thence across the Warner ranch to the road leading to Santa Ysabel, Ramona and San Diego. In years past the shipments have been made down the west end of the mountain and out of the county by way of Pala. Encouragement for transportation down the east side of the mountain has been given through the efforts of Supervisor Foster and the national forestry service in the commencement of the construction of a good road up the mountain, commencing at the Warner ranch. County Surveyor Butler is said to have declared that the building of a road with nothing heavier than a 5 per cent

grade would be easily possible. Palomar mountain people are strong for the completion of the mountain road.

On December 12, 1918, the San Diego Weekly Union reported on the East Grade [133]:

$50,000 HIGHWAY IS PLANNED FOR MOUNTAIN EMPIRE

Work to Be Done by County And Forest Reserve on Fifty-Fifty Basis.

RAMONA, Dec. 7. – The highway system of the Mountain Empire is in line to get a substantial boost by the building, at a cost of about $50,000, of a fine road from Warner ranch up the east side of Palomar mountain at the Nellie postoffice with the road leading down the west side of the mountain to Oceanside by way of Pala, and to Escondido by way of Valley Center. According to plans the work is to be done on a 50-50 basis by San Diego county and the national forest, of which M.R. Tillotson of Escondido is the supervisor in charge. At a cost of about $6500, of which better than $2500 was paid by the forestry department, a little more than a mile of the road has been built, the section being near the foot of the east side of the mountain, in Supervisor Joe Foster's district. At present culverts are being installed in the stretch of road completed. The total distance of road to be built is 15 miles, the expense being estimated at about $3000 a mile, or approximately $50,000 for the entire job. At one place, for a distance of less than 150 feet, the surveyor calls for a 7 percent grade, but at no point for the rest of the boulevard is a grade of more than 5 per cent indicated. It is asserted that the cost of construction of the first mile has been double that estimated for the balance of the mileage. The route, as agreed upon, starting at the Warner damsite, passes through the Will and Dyche valleys, and while not following the line of the old road along the ridge of the mountain, and its, at places, grades of better than 30 percent, will strike the present highway at the Nellie postoffice. The road will not only serve the people already living on the mountain but will open up the country for prospective settlers, as well as making accessible to the public one of the most attractive sections of the country. The road down the west side of the mountain, it is stated, will be maintained.

Learning that he was in Los Angeles for a short visit, Forest Supervisor Tillotson hastened there and was able to persuade J.C. Dort, district engineer of the forestry department, headquarters in San Francisco, to accompany him to San Diego county for an investigation of this Palomar road proposal. Last Monday Engineer Dort and Supervisor Tillotson devoted the greater part of the day exploring, much of the time on foot, the route of the highway and in getting data bearing upon the enterprise. Mr. Dort is said to have expressed himself as favorably impressed with the merits of the project. Under a recent

> act of congress $10,000,000 was set aside for the building of roads, under the supervision of the forestry department -- $1,000,000 a year for 10 years. The plan now being worked upon, and which is receiving the endorsement of Supervisor Tillotson, provides for the use of some of this money in the construction of the Palomar road. An important unit of its ultimate success, however, depends upon the action of the county, represented by the supervisors, as to the part of the expense the county will assume. The matter, it is understood, will be up for consideration by the supervisors within the next few days. At their meeting in Escondido, Oct. 12, the directors of the Chamber of Commerce of Northern San Diego County, discussed the merits of the Palomar road, at the suggestion of Vice President W.V. Nichols of Oceanside, when a committee consisting of Dr. Nichols, W.D. Bailey and Dr. N. Matzen of Escondido were named to investigate. The enterprise will have the endorsement of the northern chamber, it is thought.

On May 24, 1919, the Daily Times-Advocate of Escondido reported on the Nate Harrison Grade [201]:

> The Palomar mountain grade is now being repaired under the direction of Mr. B.H. Elmore, who has had valuable experience in this work before. As the grade is in worse condition than ever before, it is of greatest importance to this district that this work should go on.

On June 20, 1919, the Daily Times-Advocate of Escondido reported on the Nate Harrison Grade [184]:

> PALOMAR PARAGRAPHS, NELLIE, June 17. -- The Palomar Grade is now in very good condition, repaired and widened and ready for the automobilists who have already begun to follow it to the beautiful mountain top, Mecca of campers. The travelers add their appreciation to that of the mountain residents, thanking our supervisor, Mr. Westfall, for his consideration. The boys worked hard and faithfully under the able direction of B.H. Elmore, who thoroughly understands road work. They have been heard to express their regret, however, that Mr. Elmore should have been troubled with insomnia while staying on the mountain. Albert Goodin and Julian Cantarini, of Bonsall, were among those in the camp. Legislation is hoped for in one matter, concerning the grade – to prohibit the dragging of trees behind descending automobiles and wagons. Such extra brakes are not needed and seriously injure the road.

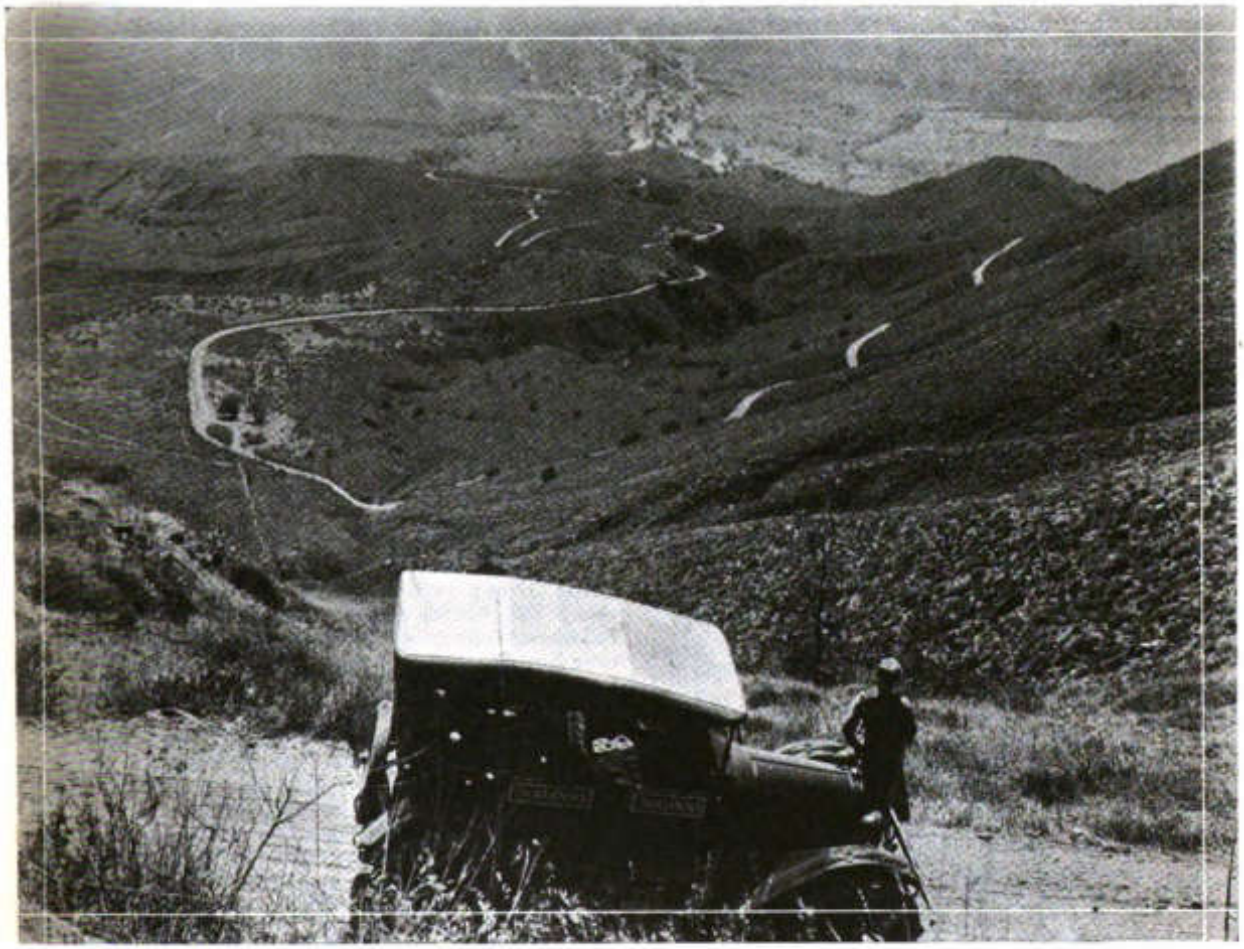
On June 18, 1919, the Daily Times-Advocate of Escondido reported on the Nate Harrison Grade [202]:

> The Palomar grade is now in very good condition, repaired and widened and ready for the automobilists who have already begun to follow it to the beautiful mountain top, Mecca of campers. The travelers add their appreciation to that of the mountain residents, thanking our supervisor, Mr. Westfall, for his consideration. The boys worked hard and faithfully under the able direction of B.H. Elmore, who thoroughly understands road work. They have been heard to express their regret, however, that Mr. Elmore should have been troubled with insomnia while staying on the mountain. Albert Goodin and Julian Cantarini, of Bonsall, were among those in the camp. Legislation is hoped for in one matter, concerning the grade – to prohibit the dragging of trees behind descending automobiles and wagons. Such extra brakes are not needed and seriously injure the road.

On June 26, 1919, the San Diego Union reported on an automobile accident on Nate Harrison Grade [134]:

> AUTO OVERTURNS, INJURING WOMAN
>
> Mrs. L.C. Smith Has Legs Broken When Machine Slips Down Grade
>
> ESCONDIDO, June 25. – Details of a serious accident on the west grade of the Palomar mountain, Saturday afternoon, when Mrs. L.C. Smith of San Luis Rey was thrown from an automobile as it rolled down the embankment, resulting in the breaking of both her legs, were reported here today. Mr. and Mrs. Smith were going up the grade to the Cleaver place, which they recently bought. When near (Nate Harrison's) place, they stopped to rest. Mr. Smith put a rock under one of the rear wheels. When he removed the trig the car started moving backward with Mrs. Smith in the front seat. Mr. Smith was unable to stop the car and the automobile went off the road into underbrush on the edge of a cliff. Mrs. Smith freed herself from the machine as it went over the second time. Mr. Smith, who failed to get into the car before it went over the bank, was not injured. Although the accident occurred Saturday afternoon, it was midnight before an ambulance took the injured woman to a hospital in San Diego.

In July 1920, the Touring Topics magazine of the Automobile Club of Southern California published a San Diego back country travelogue that included Palomar and mentions crossing Palomar via the Nate Harrison Grade and the East Grade [95]:



It is a twisting, tortuous road that climbs the southern slope of Palomar Mountain.

… Palomar Mountain – that is the trip to make in full mid-summer. Out to Temecula, over Pala Grande after leaving the inland road, and up the valley of the San Luis Rey for half a dozen winding miles. Then the Palomar road turns sharply to the left and the climb begins. It is not an easy road – some grades run as high as 17 per cent, and you will have need for extra water for your motor. The south slope of Palomar is barren and hot, and gives not the slightest hint of the beauty of the summit. …

A bird's-eye view of San Diego County.

On April 12, 1921, the Daily Times-Advocate of Escondido reported on the East Grade in its "Palomar Paragraphs" column [203]:

> PALOMAR, April 9. – Every one appreciates the giving of the right-of-way for the new road up the east end of Palomar mountain by the Mendenhall company. To all appearances there will be quick action in starting work on the road. Probably in a few days Mr. Westfall will have his camp established there. On Thursday District Attorney Utley, County Surveyor Butler and Supervisor Westfall met the president of the Mendenhall Cattle company on the mountain to consult about the road.

The Palomar Mountain Good Roads association was formed on April 18, 1921, and the Escondido Times Advocate reported on it the following day, including this statement from President Louis Salmons [88]:

> Formed primarily for the promotion of good roads, but with the object of working for the betterment of the mail service and other units bearing on the upbuilding and development of the territory represented, the Palomar Mountain Good Roads association was organized Monday at the home of Louis S. Salmons, a rancher living on the east slope of the mountain, with

representatives of the various units of the region in attendance. Organization was effected with Louis S. Salmons, president; Jack P. Roberts, vice president; George Mendenhall, treasurer; J.H. Heath, secretary; Louis S. Salmons, Jack P. Roberts, George Mendenhall, J.J. Heath, Dr. Milton Bailey, Wm. Beach and E.R. McClarn, directors. Salmons, Roberts, Mendenhall, Beach and McClarn reside on the mountain; Bailey, while a resident of the city of San Diego, has large property interests on the mountain; Heath resides at Escondido.

On May 4, 1921, the San Diego Union reported [91]:

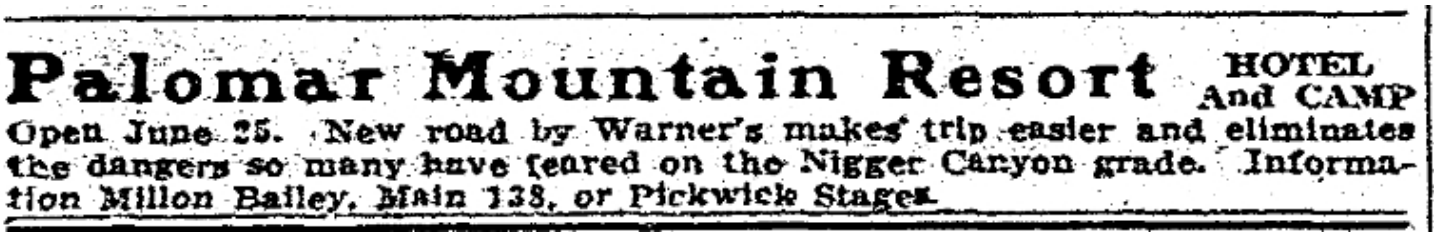
> First National Bank and Good Roads Association Offer Prize for Best Name Submitted to Express Wonder of Scenic Drive Along Palomar Mountain
>
> PALOMAR MOUNTANI, May 3. – Announcement is made here that the First National Bank of San Diego, co-operating with the Palomar Mountain Good Roads association in making the motor excursion and barbecue of Saturday and Sunday May 7 and 8 a success, had offered a prize of $5 to the person submitting a name most expressive of the wonder of the scenic drive along the crest of Palomar Mountain, from Silvercrest, on the west end, to the vicinity of the Salmons ranch on the east end. Persons submitting names must be those who have been over the drive. Announcement of the winner will be made during the back country good roads rally at Warner Hot Springs, Sunday, May 8, following the barbecue at Iron Springs, Palomar Mountain, Saturday, May 7. Entries must be addressed to J.J. Heath, Secretary, Palomar Mountain Good Roads association, care Woodward & Kerr, Warner Hot Springs, timed to reach there by 1 p.m., Sunday, May 8. … Hal Hobson, San Diego county representative of the Auto Club of Southern California, and a party of San Diegans, made the run over the excursion route – up the west end of the mountain and down the east end – yesterday to post the road and attend to other details, including the furnishing of a patrol for the two grades. Every effort will be made to avoid accident. And this, according to persons passing over the grades every day, can be eliminated if ordinary care is exercised.

On May 5, 1921, the San Diego Weekly Union published a Palomar travel article which mentions ascending the Nate Harrison Grade and crossing over to descend the East Grade [87]:

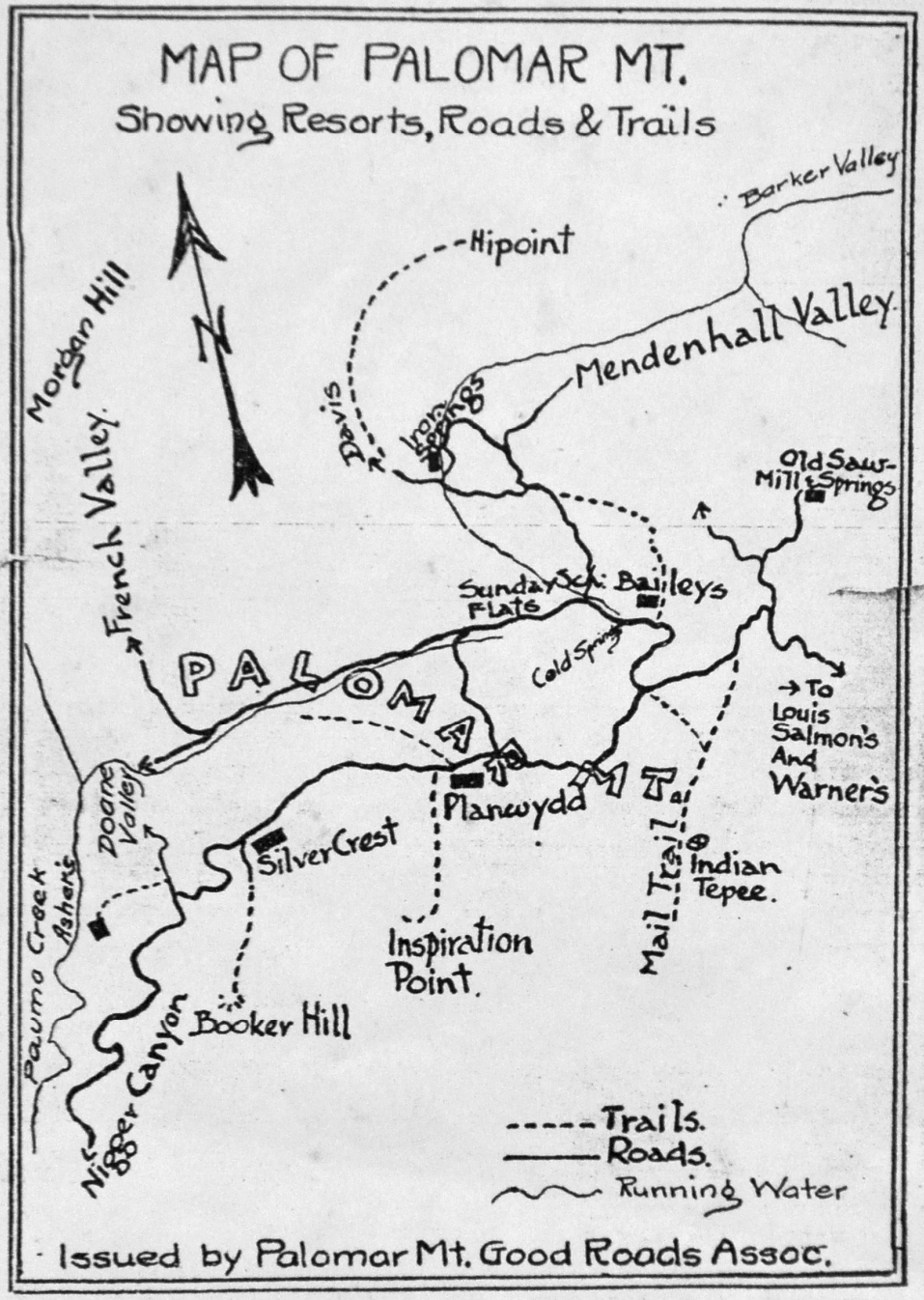
> No section of California has a greater charm for those who heed the call of the open road than has San Diego county. …With the possible exception of the Lagunas, free access to which has been of recent date, Palomar is perhaps the least known to the motoring public generally than any other part of our mountain empire, partly because it has been regarded as being more of less inaccessible and partly because it has not been advertised as it

deserves. Lying some 70 miles north and east of San Diego, this rugged mountain rises to an altitude of more than 6100 feet. A good road ascends the western slope, reached from Escondido northeast through Valley Center, or southeast from Pala. This road is kept in constant repair and in dry weather is perfectly safe if the same care is exercised that should be observed on any mountain grade. … Passing through Planwydd, the J.P. Roberts place, the road winds for miles along the "rim of the world" down to the Louis Salmons ranch on the east side, and from thence descent may be made by the east road into the Warner Springs country. The upper half of this road is rather rough and steep in places, but the lower part has been improved by Supervisor Foster, the grade being easy and the roadway widened. … The Palomar Good Roads association, of which Louis Salmons is president and J.H. Heath of Escondido is secretary, will stage a big barbecue at Chimney Flat, on the Roberts place, the afternoon and evening of May 7. San Diego county people are especially invited to this event, the purpose being to interest the people of the county in the mountain itself and to create a sentiment for the completion of the road down the east side. …

On June 17, 1921, the San Diego Union ran an advertisement for Bailey's resort that mentioned the condition of the East Grade road [97]


Palomar Mountain Resort
HOTEL And CAMP
Open June 25. New road by Warner's makes trip easier and eliminates the dangers so many have feared on the Nigger Canyon grade. Information Millon Bailey, Main 138, or Pickwick Stages.

Nothing to Mar Palomar.



For additional information about places of interest on Palomar ask the manager of any of the resorts on the mountain.

PALOMAR MOUNTAIN GOOD ROADS ASSN.

June 25,26, 1921

On June 27, 1921, the San Diego Union reported on the Palomar Mountain Good Roads association event, including the naming of the road across Palomar Mountain and down the East Grade [90]:

> RAINBOW DRIVE CHOSEN AS NAME OF SCENIC GRADE
>
> Selection Announced at Big Celebration on Mt. Palomar; Woman Wins Prize.
>
> WARNER HOT SPRINGS, June 26. – "Palomar Rainbow Drive" – that is the name selected by the committee appointed to choose from the many a name for the scenic drive down Palomar mountain. The cash prize offered by the First National bank of San Diego for a name for the drive was awarded to Mrs. H.E. De Nyse, president of the Riverside Woman's club. One end of the "rainbow" is at Pala and the other at Warner. Announcement of the choice of a name was made at the two-day celebration under the auspices of the Palomar Mountain Good Roads association, which ended here tonight, having started at Silvercrest, on the mountain, yesterday afternoon...

On July 3, 1921, the San Diego Union published a short article on Bailey's Palomar Mountain mentioning the condition of the East Grade road [98]:

> MOUNTAIN RESORT EXPECTING CROWDS
>
> New Road From Warner's Ranch Removes Objection Of Grade Up Canyon
>
> PALOMAR MOUNTAIN, July 2. – The last week has been a busy one for the Palomar Mountain hotel, which opened for the season on June 25, when Mountain Empire day filled all Palomar resorts. Heretofore the big objection to visiting Palomar has been the [Nate Harrison] canyon grade, which rises 4000 feet in nine miles from Pauma valley. This objection is now entirely overcome by the splendid highway recently built from Warner's ranch by Supervisor Joseph Foster and which Supervisor Westfall is now rapidly completing near the Louis Salmons place at the east end of the mountain. …

On July 9, 1921, the San Diego Union published news on the Palomar Mountain Good Roads association and development on Palomar including this item on the Nate Harrison Grade [89]:

> As showing the improved condition of the west end grade. Mr. Linthicum said the first part of this week he hauled a boiler up the grade weighing 5200 pounds, which was so high on the truck that it barely cleared the telephone poles before leaving Escondido.

On July 10, 1921, the San Diego Union published a news item on the East Grade [96]:

> Roadmaster Bert Stewart of Fallbrook is completing the road up Palomar from Warner's ranch. This road is in good condition despite the heavy and unusual seasonal travel this summer.

On May 21, 1922, the San Diego Union published an auto tour of Palomar Mountain mentioning specifics of the Nate Harrison Grade and the East Grade [99]:

> … There are two ways up and down the mountain, the east and the west road. At this time the west road is being graded and leveled and some of the turns broadened a bit. The east road is fair but in the meadows it is somewhat boggy. Those making the trip via the east road are advised not to take tracks of other cars; make your own path over the wet, soft places. …

On May 28, 1922, the San Diego Union reported on San Diego County Road Conditions including Nate Harrison Grade and East Grade [135]:

> Palomar Mountain Road – Good condition. Has just been graded from Pala-Rincon Road up Nigger canyon. In fact graders are still on the mountain and at work. East road down mountain is in fair condition and the wet spots in meadows are rapidly drying out. Caution: When driving across the meadows, make new tracks. Soft wet earth soon bogs down if two or more cars go through the same ruts.

On October 29, 1922, the San Diego Union reported in a 'Motor Questions Answered' column [171]:

> Q. What is the best road to Palomar mountain? … The best road to Palomar from San Diego at the present time is by way of Escondido Valley Center, Rincon and the (Nate Harrison) Canyon grade. There is a new road under construction by way of Warner which is known as the East grade but it is not expected that this road will be completed until spring.

On November 18, 1922, the Oceanside Blade reported on road conditions for Nate Harrison Grade and East Grade [170]:

> For week beginning Nov. 11, 1922. … Palomar Mountain Road – West grade (Nate Harrison) canyon steep, narrow, rough in spots. East grade badly cut up but repairs being made.

On May 12, 1923, the Evening Tribune reported on road conditions of Nate Harrison Grade and East Grade [136]:

> Palomar and Laguna Roads in Good Shape
>
> Both the Nigger canyon and east roads up Palomar mountain are reported in good condition with the exception of a short stretch on the east road where the building of Henshaw dam made necessary the cutting away of the old road. This short stretch has a sharp turn and is rather steep, requiring exceptionally careful driving. Outside of this short bit, the east grade is very good. It is suggested that motorists making the mountain trip go up one way and down the other. The Laguna mountain road is in good condition, and a number of parties have already gone up the mountain. It is expected that the Palomar and Laguna trips will be very popular in the next two or three weeks.

On July 8, 1923, the San Diego Union reported on the condition of San Diego Roads including Nate Harrison Grade and East Grade [137]:

> Palomar mountain road – West end road o.k. East side road dangerous and closed for repairs.

On July 15, 1923, the San Diego Union reported on the East Grade [138]:

> PALOMAR ROAD OPEN TO PUBLIC
>
> Milton Bailey, owner of the well-known Bailey resort on the top of Palomar mountain, has sent word down “the hill” that the east road, which has been impassable for some time, is now open to the public. This will be good news to motorists, as now they can go up one way and come down the other. This makes an ideal trip for those seeking the beauties of wonderful old Palomar. Bailey has made many improvements about his resort. Enlarged porches, new tennis courts and many other things have been added to the vacationists’ pleasures. The opening of the new road carries with it the announcement that the hard pitch at the bottom at the dam has been eliminated, making easy going for any motorist now.

Bailey resort postcard, with July 1924 postmark

On July 31, 1923, the Daily Times-Advocate reported on the East Grade [172]:

> PALOMAR ROAD WORK PROMISED
>
> SUPERVISOR HURLEY MAKES A PERSONAL INSPECTION OF THE NEEDS OF ROAD WORK ON THE MOUNTAIN
>
> PALOMAR MOUNTAIN, July 25. – Following an extended inspection of the road system of the Palomar mountain, Tom Hurley, supervisor of the fifth district, meeting with the Palomar Mountain Good Roads association, at Bailey's camp, gave hope that the supervisors would be able to do considerable work of a permanent nature upon the continuance of the work of building a good road up the east side of the big hill, in 1924, agreeing with the sentiment of a resolution, directed to the board, asking it to remember Palomar in the road construction program for the coming year. The serious consideration of the road problem followed a mock session of the road boosters, in which the paving of Rainbow drive and a number of laterals, the installation of sidewalks and curbs, erection of electric cluster lights, and operation of street sprinklers was discussed and crowded off the running board as the result of a motion, offered by W.W. Prior of Escondido, to pay first attention to getting the roads graded. The lower end of the east

grade road lying in the district of Supervisor Foster is a veritable boulevard, as are a number of miles of the same grade in the boundaries of Hurley's fifth district, but the balance of the way needs fixing, although as good and better than many mountain roads of the state.

On August 18, 1923, the Daily Times-Advocate reported on the East Grade [173]:

> PALOMAR APPROACH IN POOR CONDITION, REPORT
>
> LAKE HENSHAW STATION, Aug 14. – In response to a letter from the Ramona chamber of commerce publicity club, calling his attention to the condition of the highway at the spillway of the Henshaw dam, as left by the San Diego County Water company after the completion of the dam, Supervisor Joe Foster was here yesterday afternoon for an investigation. He found the approach to the east grade of Palomar mountain to be a long way from being in as good condition as before the construction work was commenced. Foster said that he would take up with the water company the proposition of finishing the work. On account of strenuosity of work in other parts of his extensive district, Foster stated that he had not been able to visit the place before this time.

On August 14, 1924, the Daily Times-Advocate reported on a car wreck on Nate Harrison Grade [174]:

> Parties returning from Palomar report seeing the wreck of the Jack Adams car on the lower side of the west grade, near Tin Can Flat. The wreck is several hundred feet down the embankment.

On August 16, 1924, the San Diego Union published a news story on a motor tour given by the Palomar Mountain Good Roads association, which included discussion on the East Grade [100]:

> PALOMAR PEOPLE TELL SUPERVISORS NEED OF HIGHWAY
>
> Members of Board Go On Trip Through Region; Have Open-Air Conference.
>
> PALOMAR MOUNTAIN, Aug. 15. – It is generally agreed that the week-end educational motor tour Aug. 9-11, given by the Palomar Mountain Good Roads association, complimentary to the supervisors of San Diego county in the interests of an improved system of roads on the big hill, will result in the earlier attainment of the goal of the property owners, for while the tour was planned primarily for the information of the supervisors, particularly in the matter of the wonderful recent developments of the region, it proved to be of important educational benefits to the people who are bending their energies

for its exploitation. After a thorough tour of inspection of the different budding resorts of the mountain the supervisors and the people met in the shade of the big trees of Bailey's Palomar Lodge and talked matters over in a heart-to-heart way. The people told the supervisors what they would like and in turn the supervisors informed the people of some of the requirements incident to the attainment of their hopes, the result being a clear-cut understanding. Interest to the road meeting was increased by the display by J.M. Heath, county highway engineer, of a large map showing the road system of the mountain and the projected mileage of new road up the east grade, which unit was accompanied by a large amount of important data concerning easements for rights of way, costs of road construction and other details, all of which were discussed in detail.

TO OBTAIN EASEMENTS

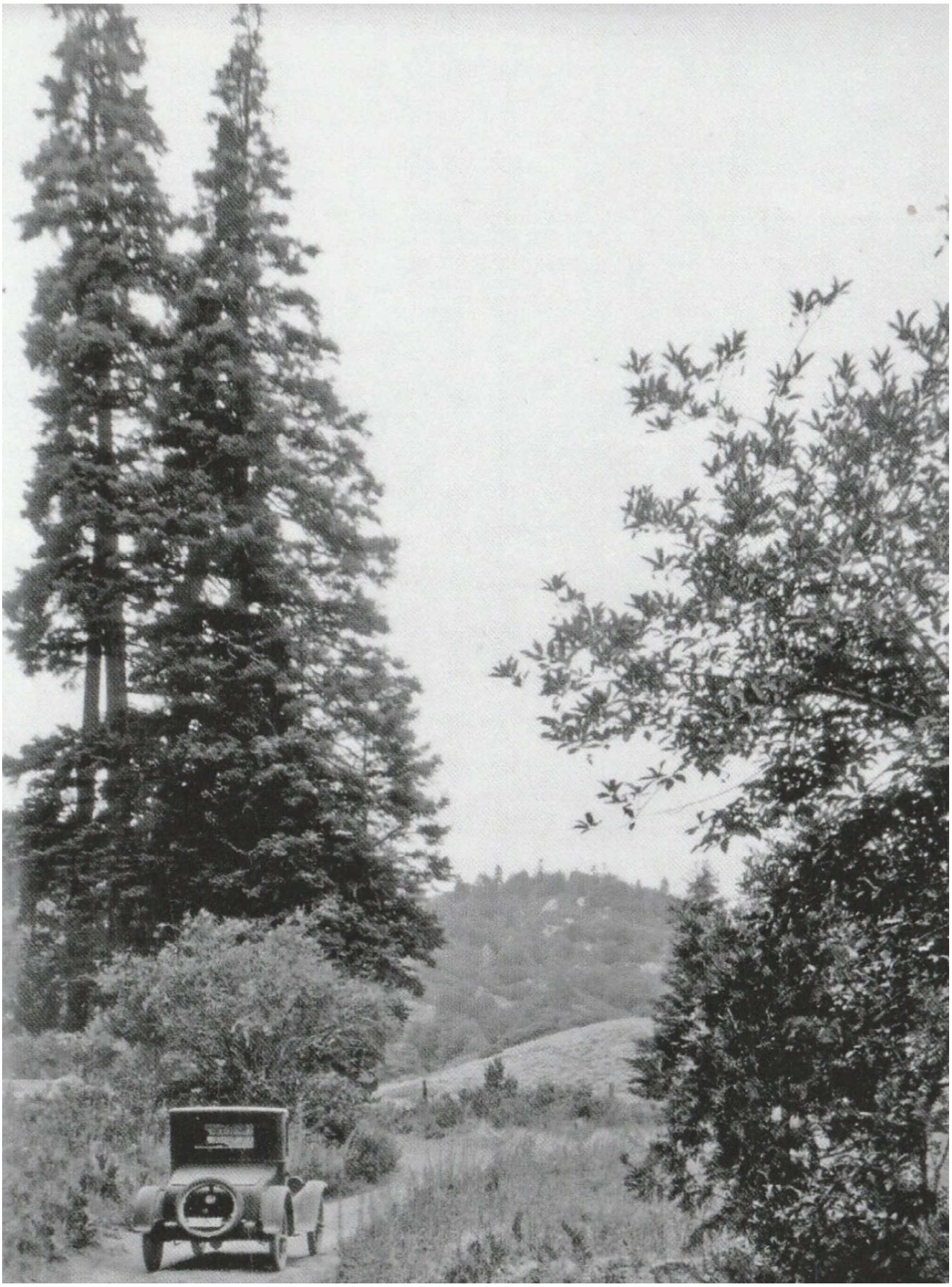
The suggestion of Supervisor Hurley that the first thing in order in the building of the new road up the east grade between three and four miles was the getting of the easements for the right of way, was adopted, a committee of property owners being named to obtain such easements. Engineer Heath stated it was going to be an expensive piece of road building, but a satisfactory grade would result. The survey already has been made and is generally acceptable to the governing interests of the mountain. Unofficially it was stated the cost would not be more than $10,000 a mile. The expenditure of $40,000 or $50,000, it was suggested, would result in a first-class highway all the way from the Henshaw lake, at the east base of the Rainbow, to Silver Crest, at the top of the west grade. At the close of the remarks of Supervisor Joe Foster, chairman of the board… it was held by a number of the larger property owners that the claims for modest recognition for road betterment on Palomar, in view of its rapid development, were reasonable and should be heeded. While admitting the urgency of the demand for road betterment the supervisors stated it was doubtful if anything could be put into this year's budget for the east side road. On the other hand, it was intimated it might be possible to finance the building in some other way. The matter of closing the west grade to travel was touched upon briefly, the argument being that in view of the expense of its upkeep it would be better for all concerned to have one good road, this being up the east side. In this case it would be necessary for travel from the north and west to use the beautiful scenic highway along the north bank of the San Luis Rey river between Henshaw lake and the foot of the west grade at the Rincon. …

On September 5, 1924, the San Diego Union reported on the East Grade [139]:

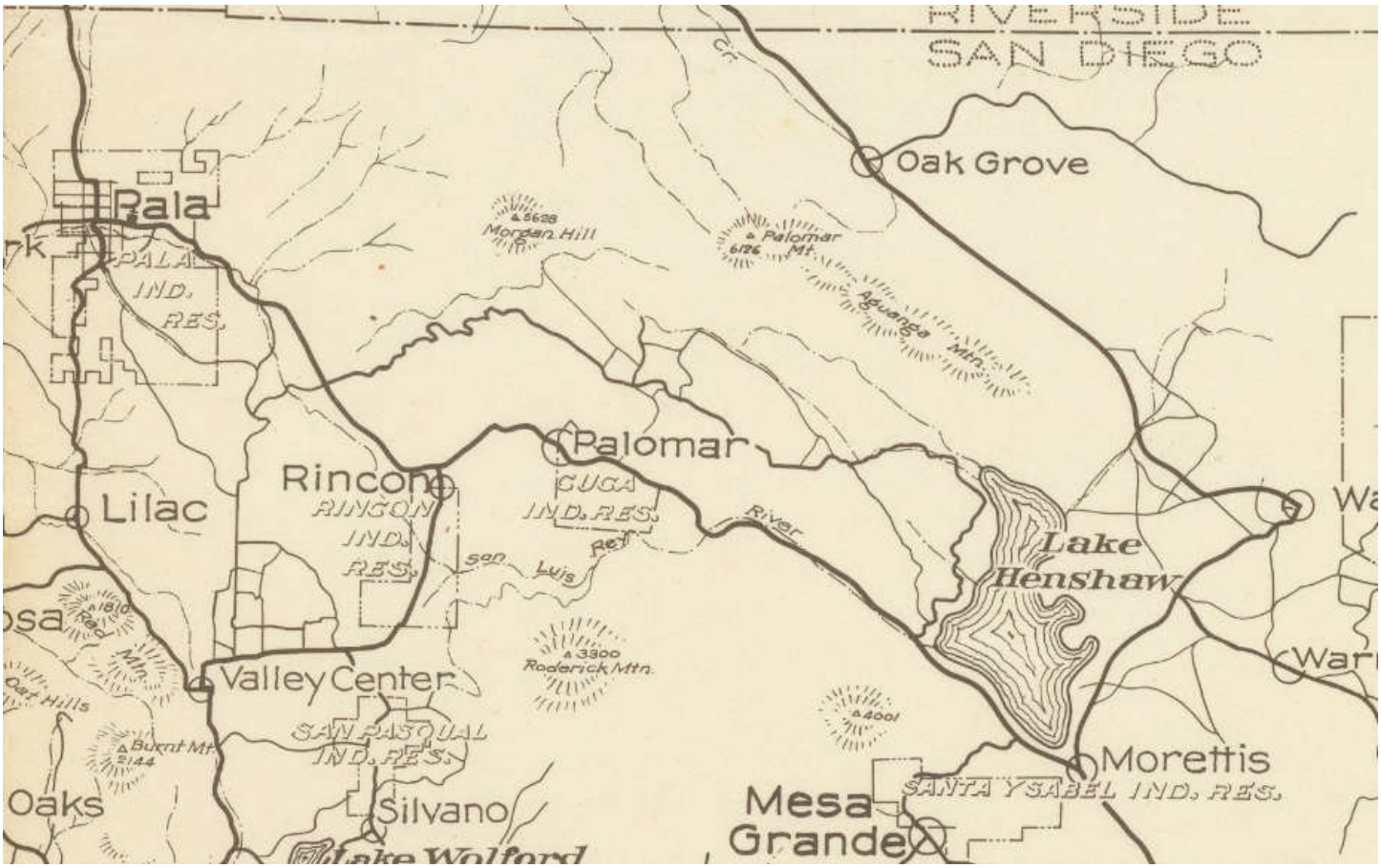
> PETITION CIRCULATED FOR ROAD COMPLETION
>
> ESCONDIDO, Sept. 4. – Following the recent good roads meeting on Palomar mountain a petition has been circulated in Escondido by Carl Mendenhall, a member of one of the pioneer families on the mountain, asking the supervisors to complete the road up the east side of the mountain, from the completed section two miles from the Henshaw dam to a place known as Martins. The petition is being signed by owners of campsites and lots on the big hill and will make a formidable showing when presented to the county managers.

On September 11, 1924, the Evening Tribune reported on the East Grade [140]:

> PLAN IMPROVEMENT OF PALOMAR ROAD
>
> First steps toward the improvement of the Palomar mountain road were taken today, when the board of supervisors adopted a resolution directing the county surveyor to make the necessary surveys and obtain easements for right of way. About four miles of road on the eastern grade of the mountain will be improved under the proposed plan. Petitions containing the signatures of more than 200 residents of the county were presented to the board today, and a large delegation was present in support of the petitions. Improvement of the road is necessary to the development of Palomar mountain and for the best interests of the county as a whole, the petitioners declare.



East Grade, Dyche Valley, c1925 Brad Bailey photo



Palomar Mountain roads circa 1925
Automobile Road Map, San Diego & Imperial Valley
Los Angeles: American Automobile Owners Association, c1925
www.historicpictoric.com/products/historic-map-san-diego-imperial-valley-c1925-american

On November 25, 1925, the Daily Times-Advocate reported on the East Grade [175]:

> ANOTHER FINE ROAD FINISHED
>
> TWO AND A HALF MILE SECTION OF PALOMAR MOUNTAIN DRIVE COMPLETED, GIVING BETTER RIDE UP THE EAST END
>
> PALOMAR MOUNTAIN, Nov. 25 – The permanent and temporary residents, together with prospective owners of cabin on the crest and the slopes of Palomar Mountain, have special reason for Thanksgiving tomorrow, because of the effective work done the past season under direction of Supervisor Hurley, on the construction of two and one-half miles of splendid new road on the east grade unit of the Rainbow Drive, from Fink valley to the Salmons ranch. The completion of this mileage means the elimination of two meadows which were impassable in the winter months and affords a boulevard wide enough in many places for three automobiles to pass. Moreover, the mileage is well drained and has easy grades. The work was done when the stock and road machinery of the fifth supervisorial district could not be used to advantage elsewhere, thus

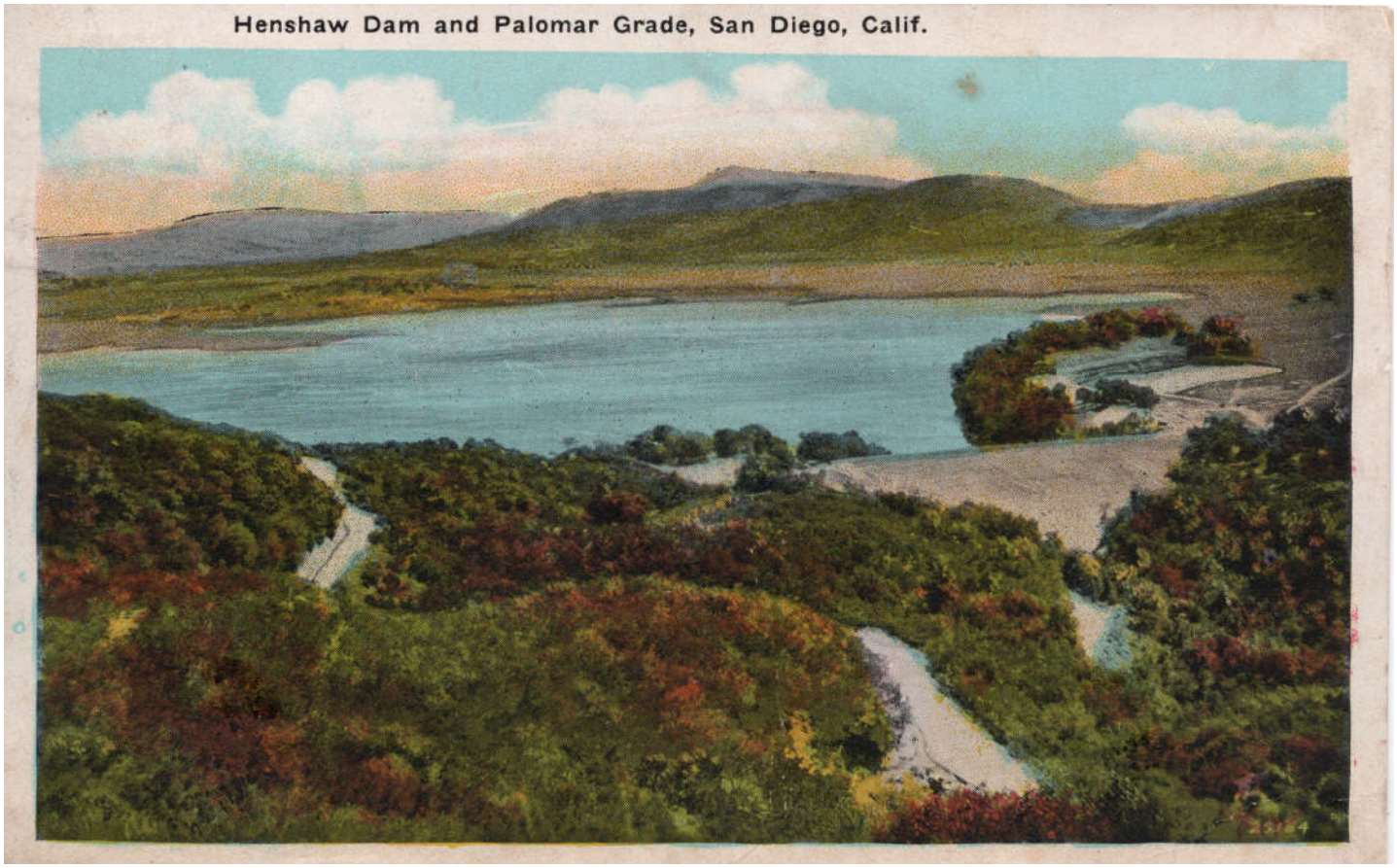
> resulting in an important saving in expense. According to report of extensive property owners on the mountain, it is the intention of Supervisor Hurley, as funds may be available, to construct two or three miles of road on the mountain each year and which will eventually make of the Rainbow Drive one of the most picturesque drives of the southland, barring none – the trunk road to be of good width, with easy grades and through a most interesting country. Few people have an idea of the fine piece of work which has been done under Supervisor Hurley's direction on the mountain this summer. All of the funds came out of the gasoline tax money. He has installed many improvements, widening and the like, on the San Luis Rey river road, between Rincon and Lake Henshaw.

On June 17, 1926, the Oceanside Blade reported on the East Grade and Nate Harrison Grade [101]:

> REBUILDING PALOMAR ROAD
>
> Work of completing the relocated upper portion of the Palomar mountain road on the east side of the mountain and west of the Salmons place has been started by Supervisor Hurley. Three big tractors and grading outfits and a steam shovel have gone up the mountain and a camp has been established near the Salmons place. The grading outfits went up the west grade and over the mountain to the east side putting the grade and the road on top of the mountain in good shape, in fact it is reported in better condition than for several years. The drainage humps in the grade have been taken off, the loose rock has been removed and Supervisor Hurley says that anyone can go up the west side now with ease, so far as the condition of the road is concerned. …

On June 26, 1926, the San Diego Evening Tribune published an article on an auto tour of Palomar mentioning road conditions on the East Grade and the Nate Harrison Grade [102]:

> … And now for the first time in the history of the mountain really fine roads are up both sides. The east grade, which is via San Ysabel and Henshaw lake, is a magnificent highway, easily done in high gear for the average car; wide, and with ample room for three cars to pass, with a four-car width on the curves. The west grade has just been put into fine shape. It is smooth, yet a little narrow in spots, but second gear will carry the car to the top in good time. An ideal trip is to use the east grade up and the west grade down. …



East Grade above Lake Henshaw on postcard postmarked February 25, 1927

On March 10, 1927, the Oceanside Blade reported on the Nate Harrison Grade and the East Grade [176]:

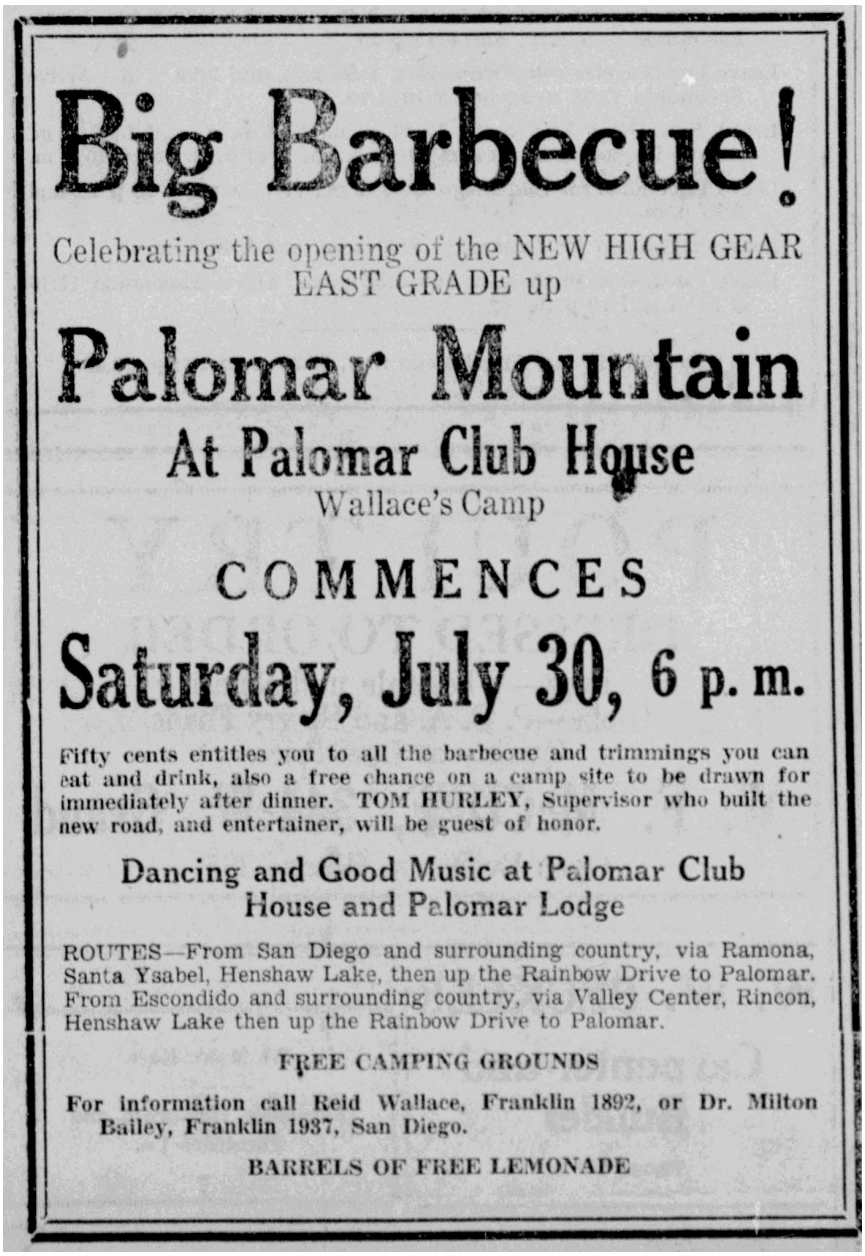
> PALOMAR ROAD OPEN UP THE WEST SIDE
>
> The western Palomar mountain now is open to motorists. The road is open as far east as the Bailey resort, according to road men. The road up the east side of Palomar mountain will require considerable work before it is ready for motorists and will not be opened for a long time, Settles said. The road superintendent inspected storm damage and went down the east grade to a point within two miles of Lake Henshaw on horseback.

On March 17, 1927, the Los Angeles Times reported on the East Grade being closed [105]:

> WEST GRADE OPEN
>
> ESCONDIDO, March 19. – The west grade of the Palomar mountain, fifteen miles north of Escondido, is open to travel. The east grade, which was badly washed on account of the new work, remains closed.

On May 3, 1927, the Daily Times-Advocate reported on the Nate Harrison Grade and the East Grade [177]:

> PALOMAR GRADE ON EAST SIDE IS STILL IMPASSABLE
>
> While the trip up Palomar mountain can be made by the west grade that road is reported very rough at present, though it is expected it will be put in good shape very shortly. Those who have been up the mountain advise pleasure seekers to wait that time. The east grade up the mountain is impassable because of bad washouts and caved off places, especially near the lower end. When Supervisor Foster will have this damage repaired and the road made usable again is not known.



Big Barbecue!

Celebrating the opening of the NEW HIGH GEAR EAST GRADE up

Palomar Mountain

At Palomar Club House

Wallace's Camp

COMMENCES

Saturday, July 30, 6 p. m.

Fifty cents entitles you to all the barbecue and trimmings you can eat and drink, also a free chance on a camp site to be drawn for immediately after dinner. TOM HURLEY, Supervisor who built the new road, and entertainer, will be guest of honor.

Dancing and Good Music at Palomar Club House and Palomar Lodge

ROUTES—From San Diego and surrounding country, via Ramona, Santa Ysabel, Henshaw Lake, then up the Rainbow Drive to Palomar. From Escondido and surrounding country, via Valley Center, Rincon, Henshaw Lake then up the Rainbow Drive to Palomar.

FREE CAMPING GROUNDS

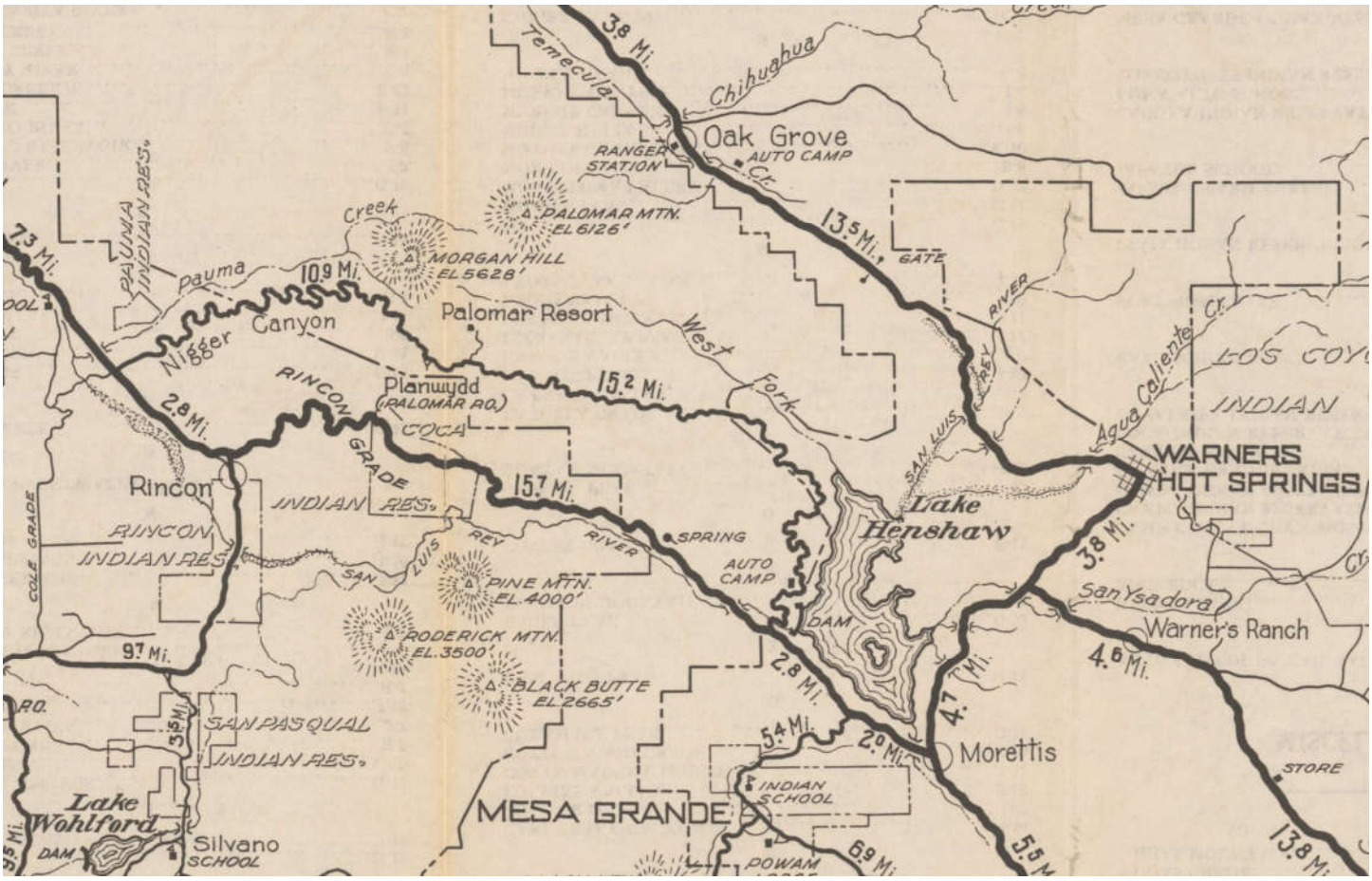
For information call Reid Wallace, Franklin 1892, or Dr. Milton Bailey, Franklin 1937, San Diego.

BARRELS OF FREE LEMONADE

Daily Times-Advocate (Escondido), July 27, 1927, page 1, column 1

On July 10, 1927, the Los Angeles Times reported on the East Grade and the Nate Harrison Grade; Fink Valley is Will Valley, and Palomar Camp Site is Birch Hill [103]:

> PALOMAR ROAD FINISHED
>
> Highway Up East Side of Mountain Near San Diego Completed After Five Years
>
> PALOMAR MOUNTAIN, July 9. – Final work on the construction of the east grade of the Palomar Mountain, started several years ago, finished under the direction of Supervisor Tom Hurley of the Fifth Supervisorial District, was completed a few days ago. With the finishing of the east grade construction Hurley has put the west grade in first-class condition, making the Rainbow Drive, as the road from the east and west bases of the mountain is known, a desirable road to travel, as mountain dirt roads go. Either of the grades can easily be made on high gear all of the way. Opinions of motorists differ as to which is the best road to take, some preferring one grade and some the other. Many of them, however, use both, coming up one way and going back the other. Hurley's work of permanent road building has been the mileage from below the Salmons place, on the east side, from Fink Valley, to the top at the Palomar Camp Site. The mountain is drawing increased patronage from Los Angeles and vicinity, the route here lying either by Riverside county points, and Pala, or by Oceanside and Pala as the most direct. Another route is by way of Escondido, from Oceanside.



Palomar Mountain roads in 1927

Automobile road map of San Diego County California

Automobile Club of Southern California, 1927

searchworks.stanford.edu/view/11848151

The September 1928 issue of The Highway Magazine (page 241) reported on the East Grade:

The road to Palomar Mountain, near San Diego, connects San Diego with many popular outing places.

By-Ways Provide Weekly Outings for Citizens of San Diego County

San Diego County develops local mountain roads.

IN addition to the development of their main county roads, the County of San Diego is taking an active interest in the building and maintenance of the roadways leading into the scenic hills adjacent to the centers of population. These roadways make it possible for the city folks to reach within a few hours' drive beautiful wooded playgrounds.

Such a by-way is the road to Palomar Mountain. This has been made wide enough to enable two cars to pass one another easily, and the grade is such that the road may be traveled practically all the way in high gear. Armco corrugated culverts care for the drainage ways.

County road supervisors Tom Hurley and Joe Foster were responsible for this roadway that means so much to the weekend outing seeker, and under the direction of superintendents Ernest Settles and Roy Keyes the work progressed without much more than the usual minor difficulties.

Highway Briefs

CANADA — A trans-Canadian highway, from Halifax to Vancouver, is projected. At present no continuous road exists north of the Great Lakes between Sault Ste. Marie and Winnipeg.

WASHINGTON — An oil treating contract covering the unprecedented distance of 105 miles was let recently near Spokane. The consideration was $159,897, which covers scarifying and brooming and applying two courses of stone chips and three applications of oil.

Armco culverts provide the drainage which insures fullest use of San Diego County's local roads.

On July 6, 1929, the San Diego Sun published a story on a group associated with the Sun newspaper travelling to Palomar Mountain, mentioning the Nate Harrison Grade and the East Grade [161]:

> … The Sun party, in their Oldsmobile from Louis C. Malre's, took the coast route on the down trip, and returned on the inland highway. At Oceanside the party turned inland for the 25-mile drive to Pala … The popularity of Palomar has been greatly stimulated by the new road via Henshaw lake. For many years, the only road up from Pala was that up (Nate Harrison) Grade, and if it is possible for a road to have a stubborn personality, the (Nate Harrison) Grade road takes the laurels. To make the acquaintance of this famous stretch of mountain road, the Oldsmobile party placed their faith in the Oldsmobile and tried it. Via (Nate Harrison) Grade, it is 20 miles from Pala to Palomar; while via the new and much easier road, going by Henshaw lake, the distance checks at 41 miles. Seven miles from Pala the (Nate Harrison) Grade turn-off is found. Once the road heads for the bleak southern slope of the mountain, the motorist realizes that a climb is in store, and after following the zig-zag switchbacks for the 10 miles to the pine regions, he is not surprised that he has driven from an altitude of 800 feet above sea level to one of 5600 feet. At the present time the (Nate Harrison) Grade road is in poor condition, due to innumerable little drainage trenches cutting across it. The recommendation of The Sun party is that the new road be utilized. It adds only 20 or so miles, and in addition, is "high gear" for almost the entire distance up into the mountains from Henshaw lake, and holds a great deal of scenic interest. … San Diego county is planning on grading the (Nate Harrison) Grade road and widening it, according to information The Sun – Oldsmobile party received. … after spending the night at Palomar lodge, they started the return journey to San Diego, via Henshaw lake. The new highway from Palomar to the lake is 15 miles in length. It is wide and maintained in splendid condition. There are few sharp turns, and as the road goes down the mountain, far below can be seen the winding course of the San Luis Rey river, which has its headwaters at Palomar. …

On September 4, 1929, the Calexico Chronicle published a travel column on Palomar Mountain which mentioned the Nate Harrison Grade and the East Grade [178]:

> … Last year a new high gear road was constructed from the Henshaw dam on the east side steadily up around the slopes for fifteen miles to Palomar Lodge, the well known resort and postoffice. The scenery gained from this winding drive crowds as much into fifteen miles as any panorama we have ever seen with the possible exception of the Paradise valley drive up Mt. Ranier. … We're told Palomar Lodge will remain open all winter this year,

the first time in its history, and the new road will be kept open and free of snow. …

On February 3, 1930, the Daily Blade-Tribune reported on the East Grade and Nate Harrison Grade [179]:

PALOMAR ROAD IS NOW OPENED

Oceanside Men Reach Top Up East Grade With Little Trouble

It will be good news to the many who are fond of visiting northern San Diego county's mountain resort, Palomar, to know that by another week-end the mountain will be readily accessible from the east side over roads that will be dry and have been put in condition for travel. The west road is not advisable at present because of snow and fallen trees. L.T. Dick and W.S. Spencer were among those who visited the back country yesterday, and succeeded in driving to within a mile and a half of the Wallace resort, at which point they were compelled to take to nature's method of locomotion and hike over and through two feet of snow to the lodge and cabins which crown the hills at the resort. The east road up the mountain was in fine condition to within a couple of miles of Louis Salmons' [text missing] the laudable desire to keep folks out of trouble, had stuck up a sign in the center of the road with the terse suggestion "Don't Try It." However, some sanguine soul, evidently from Missouri, had driven right over the sign and tackled the deep mud and melting snow of the ensuing two miles of grade, and apparently made it to the top, as the Oceanside representatives were unable to discern any signs of a stranded car or any marooned or starving autoists anywhere in the visible landscape. A number of cars were passed stopped below this point where the fainter hearted had been unwilling to take a chance. Stopping to put on chains, the Oceanside party plunged into the mud and with little difficulty got through to the dry road at the Salmons ranch, after which the remaining ten miles to the road which turns off to the Wallace resort was found to be in fine shape. At that place the car was left and the distance to the cabins negotiated on foot. … At one point a well known resident of the Wallace resort was encountered, with his wife, busily engaged in shoveling a track up a hill in the endeavor to get his stranded car to the top of the rise, in the hope that he might be able to drive it down hill to the cleared road about a mile farther on. …

On November 13, 1930, the San Diego Union reported on an automobile accident on the Nate Harrison Grade [141]:

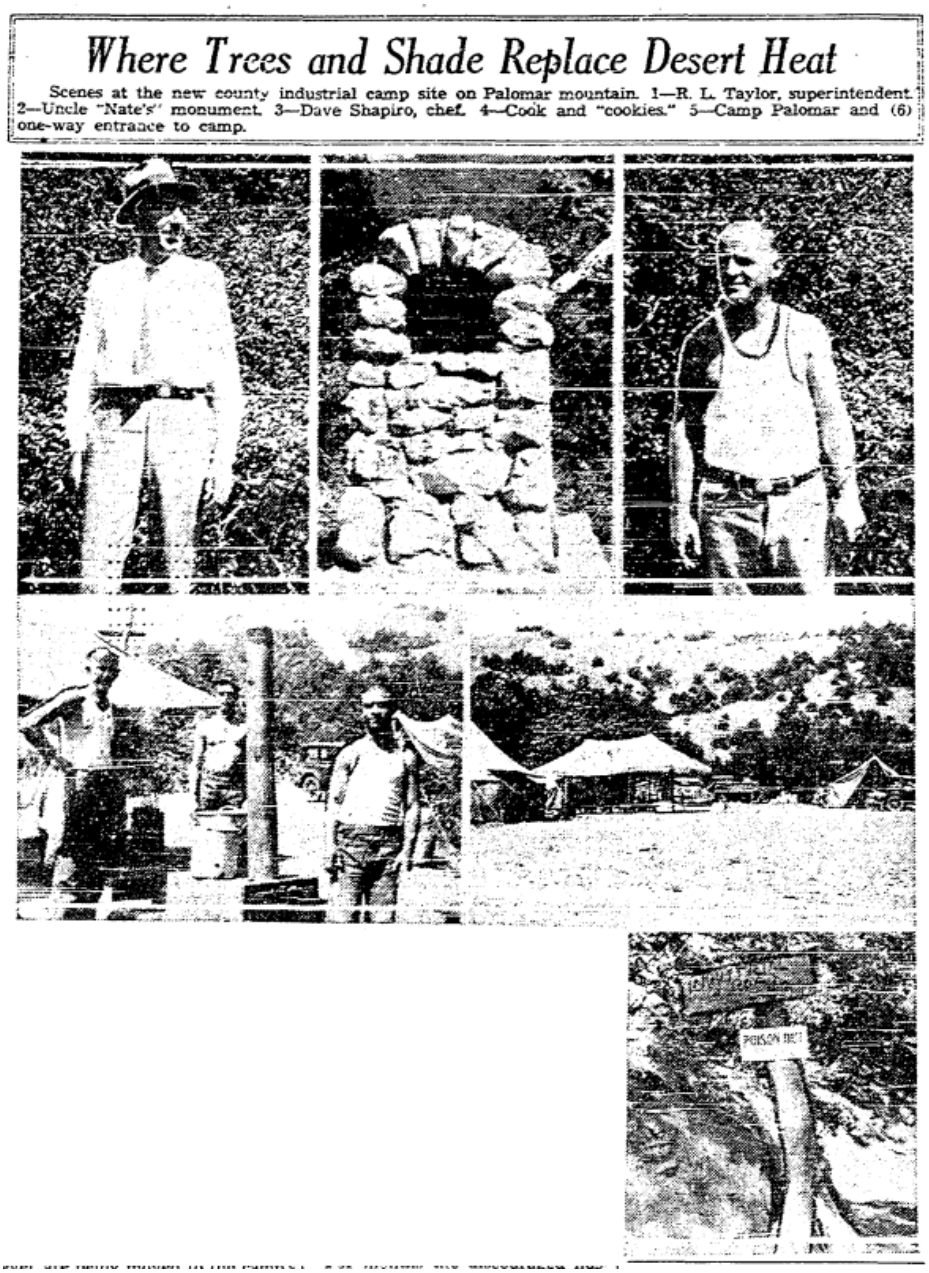
> Injured Dog Drags Girl to Safety When Car Dives 200 Feet
>
> ESCONDIDO, Nov. 12 – A husky police dog, a lot of luck, a giant boulder and the strong frame on top of her automobile are responsible today for the safety of Miss K.L. Johnstone. Monday Miss Johnstone, who lives at 902 West Palm street, San Diego, decided to go for a drive. The mountains beckoned. But before Miss Johnstone would reach her destination – Palomar – darkness began to fall. At that time she was about half way up the steep west grade of Palomar mountain. She turned her automobile around – or rather started to. A heavier machine, apparently running in high gear, despite the steepness of the down-grade, struck her car. The impact hurled Miss Johnstone, her auto and her dog off the side of the road into space. Six times the machine overturned, indentations on the steep bank reveal. Then, 200 feet below where it left the road, the car struck a boulder. The rock held. The car stuck. For 1800 feet farther down yawned space.
>
> Two men, driver and passenger in the car that catapulted Miss Johnstone's machine from the road, scrambled down the steep bank to her assistance, she said here. They promised to return with help. But the help never showed up. Unconsciousness overtook her. Beside her lay her dog. He was injured but not fatally. About 2 a.m. Miss Johnstone regained her senses. Clinging to her dog, she managed to climb to the road above. As the first indications of dawn showed in the eastern sky she walked into an Indian's hut, six miles from where the accident took place. At her side was her dog. The Indians gave her first aid and sent here for help.
>
> Today Miss Johnstone was at home, badly bruised, suffering from exposure, shock and cuts. She has no idea who the men were that knocked her off the road. Her car is almost demolished. "He is just a dog," her mother said today, "but he saved my daughter's life." The dog, too, will recover.

Nate Harrison Grade, April 16, 1931
Marian Koshland Bioscience & Natural Resources Library, University of California, Berkeley
www.lib.berkeley.edu/BIOS/vtm/

On February 3, 1933, the Daily Times-Advocate reported on the East Grade and the Nate Harrison Grade [180]:

> ROAD NOT OPEN TO PALOMAR TOP
>
> Ernest Settles, road foreman of the fifth supervisorial district, called the Times-Advocate Friday to announce that the road up the east side of Palomar Mountain is not open to the summit. It is best for motorists to turn back at the Louis Salmons place on the east grade, according to Mr. Settles. He asserted that beyond that the snow is five or six feet high in the road and that it is almost impossible to find a place in which to turn around. The west road up Palomar is impassible, Mr. Settles declared.

On September 24, 1933, the San Diego Union reported on the Nate Harrison Grade [18]:



Where Trees and Shade Replace Desert Heat

Scenes at the new county industrial camp site on Palomar mountain. 1—R. L. Taylor, superintendent. 2—Uncle "Nate's" monument. 3—Dave Shapiro, chef. 4—Cook and "cookies." 5—Camp Palomar and (6) one-way entrance to camp.

MOVE INDUSTRIAL CAMP PRISONERS TO PALOMAR SITE

Their bodies almost black from the desert sun, the 50 or 60 prisoners of San Diego county industrial camp in Borrego valley, below sea level, are being moved to the camp's new ideal site, Rainbow Drive, under shelter of oaks and sycamores on the west grade of Palomar mountain. The side is designated on maps as "Nigger Nate's," and has an elevation of 4600 feet. Under direction of Sheriff Ed Cooper's superintendent, R.L. Tayor, an advance detail of 15 men has made camp at this historic site, using tents, which later will be replaced with wooden shacks comprising the camp equipment in Borrego valley, 51 miles away. Moving equipment is under way and when the work nears completion the rest of the prisoners will be

taken to the new camp. Then work will start on the improvement of the eight-mile west grade. Survey for the engineering work is being done by men under supervision of Ernest Childs, county engineer, and his chief field deputy, "Chet" Richards, who were at Palomar Tuesday to confer with Ernest Setttles, Supervisor Tome Hurley's road foreman, Superintendent Taylor and Louis Salmons, pioneer citizen of the east side of the "big hill." Men who have arrive from Borrego are loud in their praise of the new camp site.

On September 29, 1933, the San Diego Evening Tribune reported on the East Grade [106]:

CAVALRY TROOP? NO, JUST BOARD VIEWING NEW ROAD ROUTE

BY RICHARD MANSFIELD. San Diego county's five supervisors, who have made it plain that they conduct county affairs "like horse-and-buggy supervisors," today had a chance to get back in the saddle to inspect a proposed new Palomar mountain road route that may save 10 miles. Sheriff Ed F. Cooper was with them and keen for the chance. The occasion was a trip to the new site of the county road camp, which is being moved from Borrego valley (where it has been since it was established as an adjunct to the county jail) to (Nate Harrison's) spring on the old road leading up the western slope of Palomar. E.W. Settles, road foreman for Supervisor Tom Hurley, believes a new route on the eastern slope of the mountain will prove shorter, and reports that at the lower end is an excellent site with water already developed. The comparative merits of the two routes drew attention of the supervisors, who went by automobile to Pala and beyond, and who were to have their choice of mounts to inspect the proposed unopened new route. Report as to how many of the supervisors, and who, chose to ride horseback was awaited at the courthouse today with undisguised interest. Supervisors Hurley and Edgar F. Hastings are portly, and courthouse attaches were free with comments that any horses acting as steeds for these two supervisors will know it. Supervisors T. LeRoy Richards, S.P. McMullen and Ray Trussell incline to hungry leanness.

On July 19, 1934, the Coast Dispatch newspaper of Encinitas reported on an automobile accident on Nate Harrison Grade [162]:

YOUNG COUTTS INJURED IN TRUCK ACCIDENT

When the steering wheel broke on the truck in which Elliot Coutts son of Mr. and Mrs. Fred Coutts of Leucadia, was riding Monday morning he sustained injuries which necessitated his removal to a hospital in Paradise valley. The driver of the machine escaped serious injury by jumping just before the truck crashed down a steep embankment. Young Coutts also

jumped, but was thrown down the side of a canyon. He was brought to Dr. Lindsay's office for treatment and taken to the hospital Tuesday where X-rays are being taken to determine the extent of his injuries. He has a scalp laceration, cuts and bruises about the body and a possible fracture of a vertebra. The accident happened on (Nate Harrison) grade near Palomar mountains.

On September 28, 1934, the Times-Advocate reported on the upcoming South Grade road [158]:

ROAD PLANS FOR BIG TELESCOPE

CLOSING OF DEAL SATURDAY MORNING TO BE FOLLOWED BY HIGHWAY ACTIVITY

Title to 160 acres at the top of Palomar mountain in northern San Diego county is expected to be held today, Saturday, by California Institute of Technology, which is credited with plans to build the world's largest astronomical observatory on the site. The institute already holds title to 40 acres obtained from the federal government in Cleveland national forest. Transfer from William and Kenneth Beach of 120 acres of their mountain ranch adjoining is set for tomorrow, and the agreed purchase price of $12,000 already has been sent to San Diego by H.W. O'Melveny, counsel for Caltech. The board of supervisors was instrumental in dickering with the owners of the Palomar site, in behalf of Caltech, says Friday's San Diego Tribune. Palomar mountain observatory road, first link of which is under construction by county prison camp labor, has taken on new meaning, Deputy Surveyor Bert Moore demonstrated today with map notes showing that the county engineering force plans a highway fit for general traffic and surpassing requirements of observatory engineers. The completed short-line route will make it possible for the motorist to drive 68 miles from San Diego to the mountain observatory site, almost one mile high, instead of 82 miles as at present over the Santa Ysabel-Henshaw lake – east grade route, of 92 miles by way of the state's inland route from San Luis Rey bridge through Pala, according to Moore's figures. By air line, the mountain top is only 45 miles from the city.

Beginning at an elevation of 2700 feet, where it leaves the secondary state highway (San Luis Rey river road), the first observatory road link will wind in wide curves up the steep south slope of the mountainside for four miles, and reach the first peak at about 5500 feet elevation, Moore figures. The second link, 4 ½ miles long, will dip and climb across the rugged mountain top, through heavy forest and reach the observatory site at about the same elevation, 5500 feet, Moore finds. The site chosen for the future home of the great 200-inch mirror is in the lee of Palomar peak, 6126 feet elevation.

Preliminary estimates for this second link, roughly surveyed, were submitted to the board of supervisors yesterday, indicating grading costs alone will exceed $35,000. The heaviest construction work will take place along the route of the first link, up the mountain, and may be more than double the cost of grading the second link. Supervisor Ed F. Hastings said he thinks grading and paving both links, between 8 and 9 miles from top to bottom, will require at least $200,000. Supervisor Tom Hurley, chairman of the board, already has applied to the state highway commission for financial assistance in the construction, and has gained a promise of "early consideration." Construction of the first link started this year when the county road camp was moved from (Nate Harrison) grade, west slope of Palomar, to Mendenhall valley, at the foot of the new grade. The first link survey has been considerably revised. It provided for a minimum curve radius of 85 feet, and has been changed to make all curves in 100-feet radius or more. The observatory engineers, who desire the convenience of a good road to the mountain top, laid down a minimum of 34-foot width for the roadway. The county standard, however, which is being adhered to in the new construction, calls for 32-foot driveway width.

The maximum grade, in the climb, will be 7 ½ percent. The observatory engineers allow a road steepness of 9 feet per 100. Two miles of the first link survey were thrown out in the resurvey, to conform to the 7 ½ percent grade maximum and allow curves of 100 feet or more radius, Moore explained. The new road, rising from Mendenhall valley on the San Luis Rey river at an elevation of 2700 feet, as stated, will cross the present county dirt road on the mountain top, 5500 feet high, near Palomar resort station. In four miles the road will climb 2800 feet. From Palomar resort station to the observatory side, each about 5500 feet high on the mountain, the last link will cross wooded rolling country offering little obstruction to construction. One small bridge will be required, according to the preliminary estimate. Supervisor Hastings believes the entire route should be open to travel within two years. The state highway, along San Luis Rey river from the bridge at Bonsall through Pala and up to Lake Henshaw, forms junctions with the present Palomar east-and-west dirt road, at Rincon on the west and Henshaw on the east. The present east grade is better than the west ((Nate Harrison) grade), and the whole route is about 10 or 12 miles shorter than by way of Pala and Bonsall from San Diego. Between Rincon and Mendenhall junction, the San Luis Rey road needs realignment and reconstruction. Supervisor Hastings says the state, which supervises this highway, has money already appropriated for this. The county is reconstructing the Valley Center road on the proposed short route between Escondido and Rincon to Palomar observatory road junction. This work is assigned to road camp labor, and much of the county road-building machinery is being concentrated along the route by John W. Cole, assistant county road commissioner.

> Moore mapped out the short line mileage as follows: San Diego to Rincon junction, 54 miles; Rincon junction to Palomar junction, 6 miles; first Palomar link (top), 4 ½ miles. Total, 68 ½. This route is by way of Valley Center and Escondido. By way of El Cajon, Ramona, Santa Ysabel and Warner's junction, the east grade route is 52 miles from San Diego to Santa Ysabel; 13 miles from Santa Ysabel to Lake Henshaw dam, and 12 miles from the lake up the east grade to Palomar resort. The 4 ½ miles from resort to observatory site, added, bring the total road mileage to 81 ½, Moore figures. By inland highway it is 55 miles from San Diego to Bonsall, 13 miles from Bonsall to Pala, 15 miles from Pala to Palomar junction and 8 ½ miles from the junction to the observatory side, making a total of 91 ½ miles, according to Moore.

On November 18, 1934, the San Diego Union reported on road and highway projects including this on the East Grade: "prison labor is being used to widen the highway from Henshaw dam to Palomar and to straighten the road until it will have a maximum eight percent grade [142]."

On January 21, 1935, the Daily Times-Advocate published a letter about an automobile trip up Nate Harrison Grade [163]:

> Tells of Trip Up West Side of Palomar
>
> Editor Times-Advocate: For the benefit of anyone who may be planning to drive soon on the (Nate Harrison) grade up Palomar mountain and doesn't know the present road conditions my wife and I wish to tell briefly of our trip Sunday. While the road was found to be in good shape early last fall it is now badly washed out most of its length. Upon entering the big timber we encountered a stretch of wet clay; the rear wheels spun. After backing 100 feet for a fresh start we negotiated the clay successfully. Then we drove onto hard snow and ice and soon we were stalled again. In a moment two cars appeared heading down grade. The occupants told us they had become stalled higher up and had turned around. By our backing a short distance space was found where the two cars could pass us. However, it appeared almost impossible for us to climb the steep grade and so we decided to return to Escondido the way we had started out. In order to reach a place where one could turn around it was necessary to back very slowly and painstakingly 100 yards. Even if we could have climbed to the summit it would have been a dangerous undertaking as the road was covered with a film of ice and there was constant danger of sliding off the outer edge and down the steep mountain side for a drop of 200 feet. Tire chains on at least the rear wheels would undoubtedly have been of great benefit but on sheer ice they are not entirely reliable. All cars driven on snowy roads should be equipped with a shovel. A pail of sand would be useful in an emergency in an icy spot. MR. AND MRS. T.P. CHAMBERS

Construction on the **South Grade** for the telescope started in 1935 [108], and the April 1936 issue of California Highways and Public Works reported on the road work.

State Building Highway Link to Site of 200-inch Telescope on Palomar Peak

By **E. E. WALLACE**, District Engineer

CONSTRUCTION by the State Division of Highways of an essential link in the road to the summit of Palomar Mountain in San Diego County, the contribution of the California Department of Public Works toward increasing scientific knowledge of the universe, and which will make possible transportation to the peak of the famous 200-inch telescopic mirror and thousands of tons of material and equipment for the world's largest astrophysical observatory, now is under way.

The observatory site is at an elevation of 5568 feet and at present is accessible only over a tortuous trail from a road being built by the county of San Diego. The work undertaken by the State will, when completed, provide the final connection with the site and also furnish an approach to the Palomar Mountain State Park.

More than eight years ago the Rockefeller Foundation appropriated funds for an observatory intended to eclipse any in existence. Five years were devoted to the task of selecting a site. The location on Palomar Mountain, comprising 720 acres, finally was chosen as the most suitable.

In order to secure the observatory, San Diego County authorities agreed to provide a road to the site, and the work of improving adjacent county roads has been in progress for the past year. A new road connecting with the secondary State highway to Oceanside is being constructed by San Diego up the south side of Palomar Mountain and a total length of 11.8 miles of maintained road must be completed in order to provide proper access to the site.

This obligation placed quite a burden upon San Diego County and so the last link of the road, designated as San Diego County's Feeder Road Project, is being financed with Federal funds, which have been apportioned to the State of California under the Emergency Relief Appropriation Act of 1935, and is being constructed under the supervision of the Division of Highways.

PROVIDING RELIEF EMPLOYMENT

The Feeder Road Project involves the construction of 3.3 miles of mountain road with a 28-inch roadbed which will be surfaced with local materials. Approximately 150,000 cubic yards of excavation, mostly rock, will be moved under this contract. One of the purposes of the undertaking is to provide employment and the specifications call for 237,370 man-hours of employment.

Because of the unusual loads which will have to be hauled over the road, a rather high standard was required.

HEAVY OBSERVATORY EQUIPMENT TO BE MOVED OVER ROAD

Part	No. to be shipped	Width	Length	Height	Weight
Mirror and Cell	1	22 ft.	22 ft.	8 ft.	100,000 lbs.
Tube	1	23 ft.	48 ft.	23 ft.	125,000 lbs.
Girders	4	10 ft.	65 ft.	14 ft.	140,000 lbs.
Horseshoe	2	20 ft.	45 ft.	5 ft.	100,000 lbs.
Lower Grillage	1	23 ft.	30 ft.	6 ft.	75,000 lbs.
Cage	1	23 ft.	23 ft.	16 ft.	50,000 lbs.

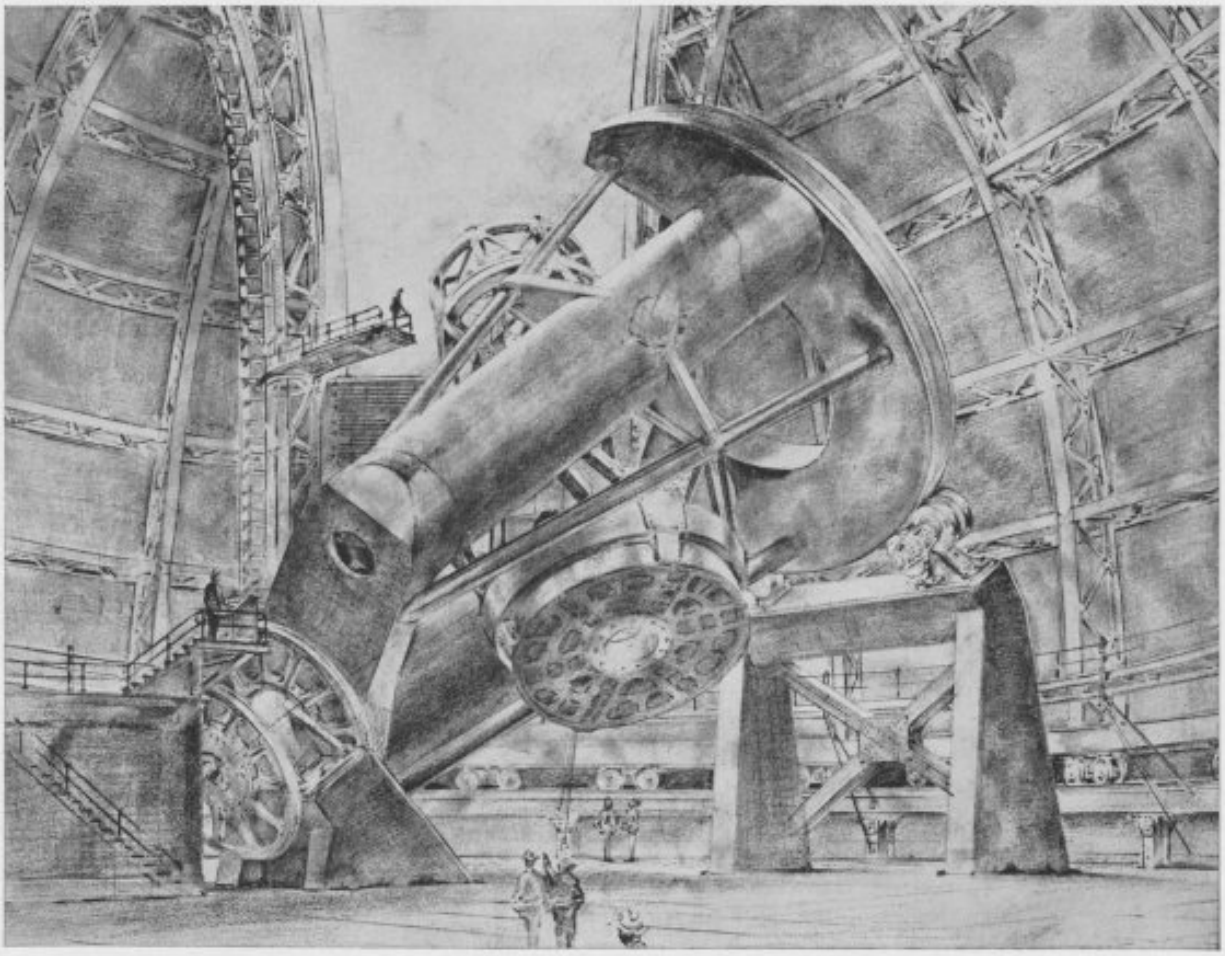
The road has been located so that traffic using it will not interfere with the observatory work. The route traverses some heavily timbered country and approaches the easterly side of the Palomar State Park, which is a beautiful tract including 2.5 square miles on the top of Palomar Mountain.

AIRPORT TO BE BUILT

From the observatory site a wonderful panoramic view of the surrounding valleys and mountains, as well as of celestial bodies, is available.

An airport will be built adjacent to the observatory which will provide for plane landings for official visitors. Necessary buildings will include at least five cottages to house the observatory staff and provide quarters for visiting scientists; the observatory housing

(Continued on page 4)



THE 200-INCH TELESCOPE as it will appear when completely assembled and mounted in the observatory on Palomar Mountain is shown in this picture supplied by the California Institute of Technology. The 200-inch mirror pierced with a central hole is shown in position at the base of the telescope tube.

PALOMAR MOUNTAIN OBSERVATORY SITE is at an elevation of 5568 feet. San Diego County is building a road 11.8 miles long up the south side of the mountain to connect with a State road to the site.

How 200-inch Mirror Will Function

(Continued from page 2)

for the 200-inch telescope and for the 18-inch telescope, the power house for the large telescope, a million-gallon water reservoir and a 75-foot water tower to provide adequate pressure for the entire site. The cottages will be termite, fire and earthquake proof and all other structures will be designed with equal precaution.

Work on the 18-inch Schmidt telescope observatory was started this month. The small telescope is to be a permanent addition to the 200-inch mirror telescope and will be used principally as a scouting instrument.

MIRROR HAS ARRIVED

Early this month the 200-inch mirror on which the eyes of the scientific world are now centered arrived in Pasadena from Corning, New York, on special cars. Three years will elapse before completion of the polishing and grinding of the mirror and before it is ready to mount in the observatory of the California Institute on Palomar Mountain.

The mirror is now at the California Institute of Technology at Pasadena where a special optical laboratory has been constructed in which the mirror will be ground. This building is lined with cork and is so constructed that no sunlight will be permitted to enter.

The three years during which the grinding and polishing are under way, the temperature within the laboratory will be controlled within very slight variations.

Recently a contract was let for the construction of the support for the world's greatest telescope to cost $1,750,000. The office of Dr. Robert A. Millikan of the California Institute of Technology forwards the following interesting information:

TOTAL WEIGHT 425 TONS

"The tube of the telescope, about 20 feet in diameter and 60 feet long, will weigh about 125 tons. This includes the 200-inch mirror, lying on a special support system at the lower end of the tube. The glass disc will weigh about 16 tons after it has been ground and polished.

The telescope tube must be rigid enough to carry an observer in the cartridge-shaped house at its upper end without flexure. It must also be mounted so as to turn freely to all parts of the heavens and to follow the stars automatically with great precision in their apparent motion from east to west. The total weight of the moving parts of the telescope, including gears and accessories, will be about 425 tons.

"Other optical combinations will enable the observer to photograph celestial objects or to study them with spectroscopes, photo-electric cells and special auxiliary apparatus at several different points. One of these is at the base of the telescope tube, below the 200-inch mirror, which will be pierced with a central hole 40 inches in diameter.

"Another point of observation will be in one of the cylindrical tubes which form parts of the fork within which the telescope tube hangs.

FIXED TEMPERATURE CHAMBER

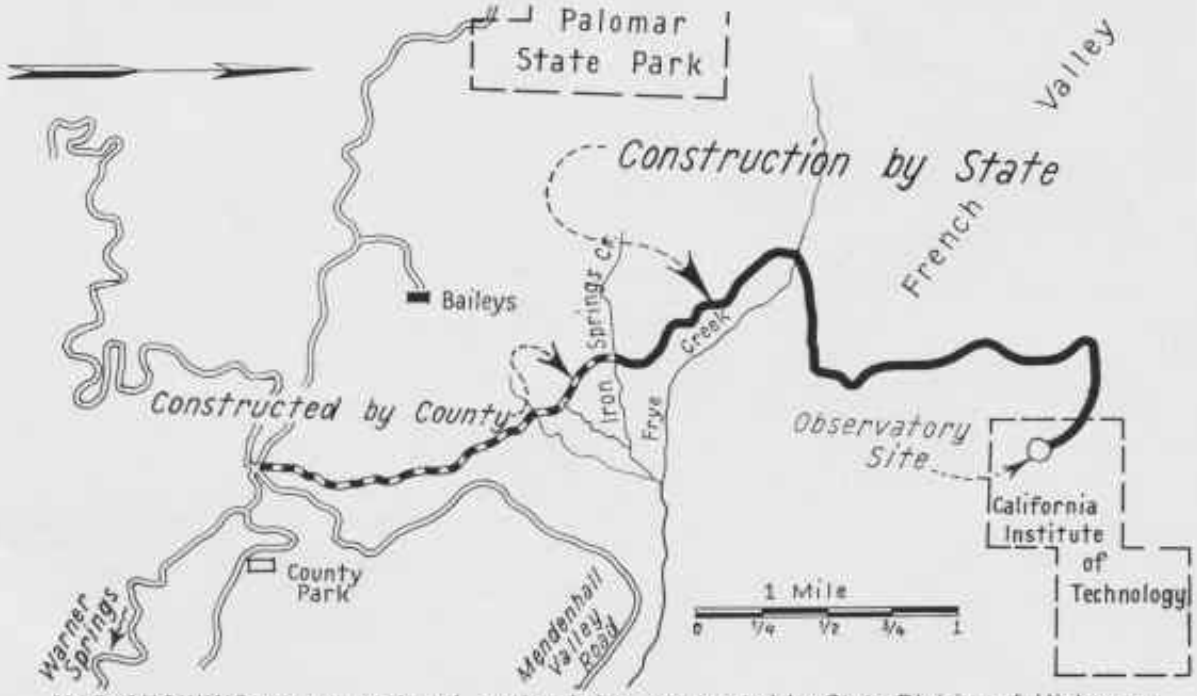
"Still another arrangement will permit the observer to work in a fixed constant temperature chamber at the south end of the polar axis. At this point the largest and most powerful spectroscopes will be mounted on a massive concrete pier.

"The entire telescope will stand within a dome 135 feet in diameter. By opening the shutters of this dome an aperture 30 feet wide, extending from the horizon to beyond the zenith, will provide a large window for observation. The lower cylindrical part of the building, fixed in position, will contain many rooms, laboratories and photographic dark rooms for various kinds of work. The dome will rotate on the circular rails at the summit.

"Contrary to many incorrect reports, the magnifying power of the 200-inch telescope will always be low or moderate. The advantage of this instrument will be its great light concentrating power. This will enable it to detect very remote celestial objects, and thus to increase our knowledge of the constitution of the universe and the nature of its apparent "expansion." The increased brightness of the images of stars and nebulae already known will permit their spectra to be photographed with spectrographs of higher dispersion than those now employed."

"Is this the Fidelity Insurance Company?"
"Yes, ma'am, it is. What can we do for you?"
"I want to arrange to have my husband's fidelity insured!"

TOUGH GOING on existing trail road to camp and observatory site on Palomar Mountain.



MAP SHOWING county road and portion being constructed by State Division of Highways.

CONTRACTORS' CAMP near mountain observatory site is a rapidly growing community.

On June 2, 1936, the Daily Times-Advocate reported on a Palomar Mountain supervisory visit by John Cole, the San Diego county road superintendent, inspecting road work on the South Grade [181]:

> … Then, after surmounting the west grade of Palomar mountain, which is in fine condition considering its curves and engineering, the travelers were taken by Mr. Cole to the Palomar telescope site, which was viewed with much interest. Here, a little city of tents and many permanent buildings awaits the surprised visitor. After a stop on the very spot where the big telescope is to be erected, the party returned to the crestline road via the old-time detour road now being used. The biggest surprise of the trip was the work done on the upper sector of the new, south-slope road that is being built by the county with the aid of road camp men. This work is now 2 ½ miles down the mountainside, having started at crestline road at the top, and the construction is going along rapidly with the aid of two great power shovels. The road that will extend from crestline to the telescope side is now complete from crestline to Iron Springs creek fill, from which place the contract of the Biasch company, private contractors, will carry the highway to the telescope plant. Machinery is now being hauled to the job by the contractors. Returning to the level of San Luis Rey valley via the east grade and Henshaw dam, the visiting party stopped at Mendenhall's (Cuca), starting point of the lower end of the new road that is to ascend the mountain on the south slope. Here they inspected the lower sector, which is a fine piece of broad, easy-going highway now finished so far as heavy work is concerned to appoint a mile above the road camp, a job of the road camp men. The party was content to view the middle sector from a distance. Report is that a mile of roadway has been built by the same men in the middle of the route up the mountain, the ends of which sector will be connected with the upper and lower sectors and, all united, will make a new road of short length, easy curves and good going up Palomar mountain to crestline and thence across a five mile boulevard to the telescope site. The trip is now full of interest. Every person in Escondido should take it now. The new road from Mendenhall's to crestline will be finished, it is predicted before Christmas. The road was selected and made possible as the best route to the telescope site by the votes of Supervisors Trussell, Sweet and Hicks. …

On July 3, 1936, the Daily Times-Advocate reported on the East Grade [182]:

> WORK BEING RUSHED ON EAST GRADE OF PALOMAR
>
> Men, trucks and grading equipment were to be moved to Palomar mountain Saturday to start improving the road on the east side of the mountain to allow hauling of the heavy equipment to the side of the giant telescope observatory, John Cole, assistant road commissioner disclosed Saturday. California Institute of Technology engineers have requested that two sharp curves be removed by Aug. 1. The work is to be done with county funds.

On July 17, 1936, the Times-Advocate reported on the East Grade [183]:

> Palomar Grade Near Readiness
>
> Within two weeks the east grade up Palomar mountain will be ready for transportation of large steel units for use in building the huge structure that is to house the world's largest telescope. John W. Cole, county highway superintendent, reported Thursday that the worst curve on the road was eliminated last week and that all other work requested by officials of the California Institute of Technology, Pasadena, builders of the large astrophysical laboratory, is being rushed to completion.

South Grade road work was reported in the November 1937 issue of Western Construction News.

TO SERVE the high level district of the city, this 100,000-gal. elevated steel tank was erected, replacing an old wooden tower.

like chamber from the supply line at El. 200.5, rises and flows over the weir to drop vertically to a branch of the reservoir drain line at El. 197. To prevent water from falling in a single drop of 25 ft., it falls through an 8-in. wide slot across the chamber, formed by the central partition wall and an adjacent wall of concrete stop-logs, to a water-filled basin at the bottom.

The overflow chamber will probably operate for several hours daily during periods of low demand and when the reservoir is full. It is planned to regulate the incoming supply to satisfy average demands and keep the reservoir full. In this way the intake control gates may be set for a constant flow depending on the season and average water demand and require few adjustments over periods of several weeks or months. Consequently, some waste is expected every day during hours when the reservoir is full and the demand on the system is small.

Located on the highest ground in the city is the new 100,000-gal. elevated steel tank which serves the high-level district in the city and a small suburban area. This tank, which has a high water level at El. 332, replaces an old wooden tower which was 33 ft. lower. The new tank has a height above the ground of 50 ft. and is 32 ft. in diameter and 21 ft. deep. Roof and bottom of the tank are ellipsoidal in shape; supporting posts are vertical. As this tank is located in a fine residential district, every effort has been made to design and build a structure that would have a pleasing appearance.

Distribution system

The distribution system in Salem has for some time been deficient in mains and laterals to give proper fire protection and, in many sections of the city, satisfactory domestic service. Prior to its purchase by the city, the distribution system consisted of 95 mi. of pipe, of which 74% was smaller than 6 in. The program for improving this condition provides for installing 282,000 ft. of new mains varying in size from 6 to 24 in., 360,000 lb. of fittings, 300 fire hydrants, and 1,200 gate valves. A new main feeder line, ranging in diameter from 24 in. where it leaves the supply line in the south part of town to 8 in. at its northerly end, will be 3½ mi. in length and is now being built. A considerable part of the distribution system is to be built by WPA labor.

Major contracts covering various phases of construction on development of the new water supply are shown in the accompanying table.

Organization

The water works program has been constructed under the administration of the Salem water commission, for which Cuyler Van Patten is manager. Preliminary studies, designs and construction of the entire development were under the direction of Stevens & Koon, consulting engineers, Portland, with the writer in immediate charge. The principal engineering assistants during construction were F. T. Koehler, J. L. Henderson, J. C. Gearhart and R. G. Anderson. The Central Inspection Bureau, Portland, made inspection and test of the steel pipe at the fabrication plant. Albert Berni, representing the contractor, was superintendent of reservoir construction and Fred F. Jenkins was in charge for the American Concrete & Steel Pipe Co. F. T. Koehler remains in charge of the distribution system reconstruction which is now under way.

Building the Road to the World Record Observatory

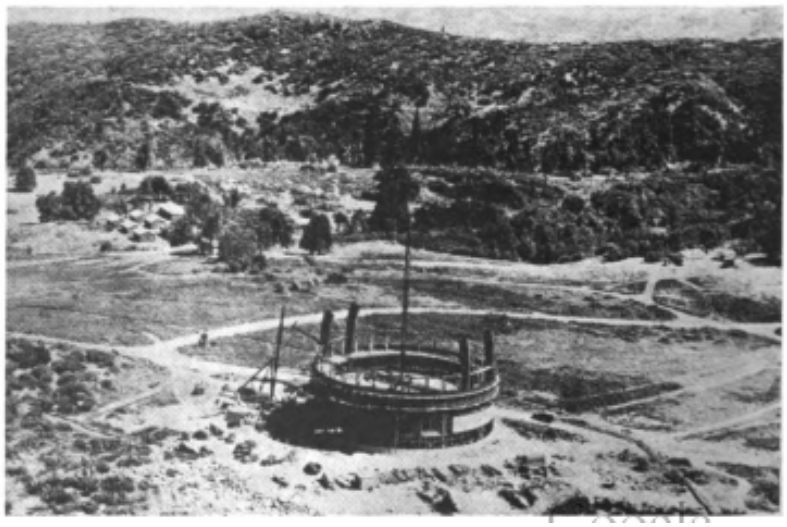
Highway up Mount Palomar designed to carry loads up to 60 tons

By JOHN W. COLE
Assistant Highway Commissioner
San Diego County, Calif.

ROAD BUILDERS are now aiding astronomers who seek to fathom the mysteries that lie beyond the reach of the most powerful instruments. The fame of the 200-in. mirror, destined for use in California Institute of Technology's $6,000,000 observatory on Mount Palomar in San Diego County, has spread throughout the world. And rightly so. It is the largest ever poured and ground, and promises to yield the answers to many questions about the universe.

The importance of this new observatory to astronomers and the preparation of the huge reflector has held the public interest for some time, but highway engineers and contractors are equally interested in the construction of the highway up the mountainside which makes possible transportation of

OBSERVATORY construction under way on Palomar Mountain. This is the site of the future home of the California Institute of Technology's 200-in. mirror which has four times the light-concentrating power of the largest existing telescope.



the giant mirror and other observatory equipment.

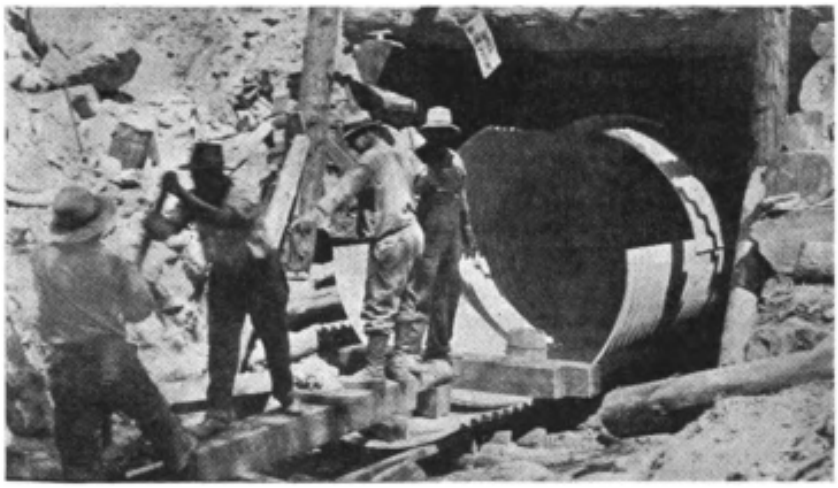
Location problem

After seeking a suitable site for the huge telescope for almost five years, the astronomers selected Mount Palomar because of its elevation, climate, distance from cities with their confusing lights and its accessibility from Pasadena, where the principal buildings of the California Institute of Technology are located.

When this decision had been reached, providing a suitable connecting highway for the transportation of the heavy pieces of material necessary for the telescope construction, as well as the "eye" itself, became a problem for San Diego County. There were then, as now, two roads leading to the top of Palomar Mountain, one up the westerly slope, commonly known as "Nigger Grade," crooked and with very steep

ASSEMBLING a 75-in. multi-plate culvert. The highway will be required to support unusually heavy loads such as the telescope tube which weighs 62½ tons.

JACKING a multi-plate culvert through an old wooden box culvert on the Mount Palomar Highway. Approximately 12 mi. of road was constructed so that materials for the observatory and telescope could be transported to the site.



grades, and one up the easterly slope with sharp curves and narrow roadway, connecting at what is commonly known as "Crest Line," about 5½ mi. south of the observatory site. Neither of these roads would meet requirements, without the expenditure of great amounts of money and labor.

Palomar Mountain had been a recreational area long before any thought that it would be selected as the location for the observatory, and San Diego County officials felt the need of better road facilities to this area. A survey was made from Crest Line down the south slope of the mountain to a connection with the state highway near Cuca Mesa grade with the idea in mind that this road, when constructed, would eventually care for much of the travel over the existing road on the easterly and westerly slope, and that the construction of approximately 6.6 mi. of new road would make it unnecessary to rebuild and improve approximately 28 mi. of old county road.

In the beginning it was proposed to construct the road with prison labor and the actual work of construction had been in progress before the selection of Palomar Mountain as the site for the "big eye." Plans for this section of the road were submitted to the Institute for approval as a part of the "road to the stars." These plans were approved with but few changes in curves and grades—minimum curve radii were changed from 75 to 100 ft.—this section then becoming a part of the road to be constructed to the observatory site. A survey was made and approved for the 5½ mi. from Crest Line to the site, making a total of approximately 12 mi. of new road to construct.

In order to expedite construction of the observatory the County of San Diego entered into an agreement with observatory officials to complete that portion of the road from Crest Line to the site not later than July 1, 1936, and the south slope road by July 1, 1937. Both sections were practically completed on time and for some time past heavy materials necessary for building the observatory have been hauled over the new road.

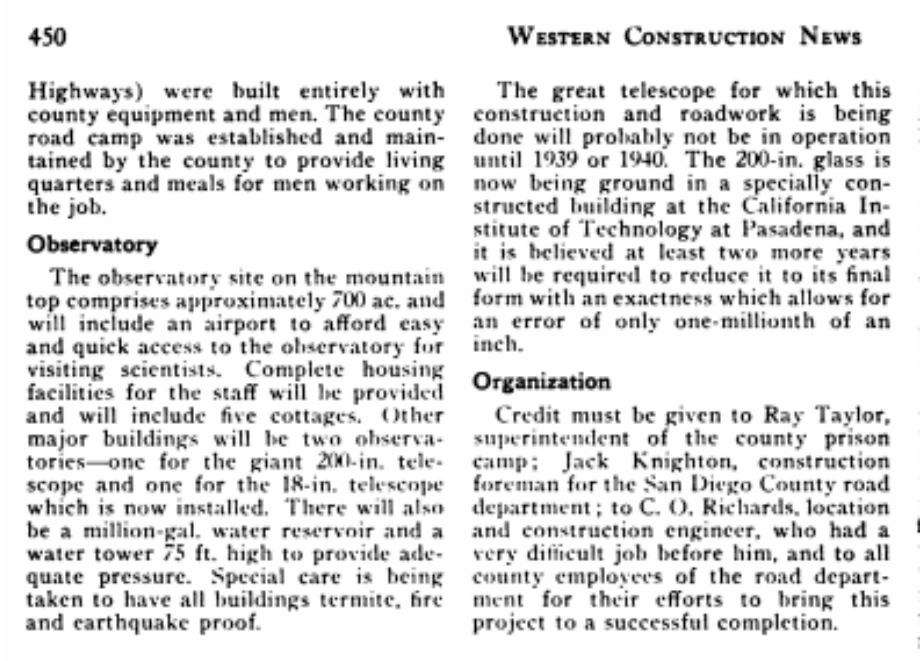
The new construction was divided into three sections—the county prison camp constructed approximately 3.7 mi. of the south slope road; the county road department 2.9 mi. of the south slope road and 1.6 mi. of the Crest Line section. The State Highway Commission built the last 3½ mi. leading to the observatory site. These three sections involved approximately 750,000 cu. yd. of excavation; the prison camp moved 200,000 cu. yd.; the San Diego County Road Department 400,000 cu. yd. and the State Highway Commission about 150,000 cu. yd.

The following table of loads indicates the necessity for a high type roadway. The best modern highways are usually designed for H-20 loading, or 20-ton loads, and some of the observatory equipment will exceed that limit by more than three times:

Part	Width (Ft.)	Length (Ft.)	Weight (Lb.)
Mirror and Cell..	22	22	100,000
Tube	23	48	125,000
Girders (4)	10	65	140,000
Horseshoe (2) ..	20	45	100,000
Lower Grillage ..	23	30	75,000
Cage	23	23	50,000

The large dimensions of many of these loads made it essential that a roadway width of at least 28 ft. be provided and that the curves have a minimum radius of 100 ft. An important consideration in designing this road was the strength of the drainage ways, as they would all be subjected to the extreme loads. The drainage structures include several hundred feet of corrugated metal culvert. One culvert, 296 ft. long, extended through two sections of the road at different elevations. There is one 90-in. multi plate and one 75-in. culvert installed for two of the larger drainage areas. The 90-in. culvert, 105 ft. long, replaced a wooden box structure through which it was placed by jacking.

Both the south slope section and the Crest Line section (excepting the 3.3 mi. constructed by the Division of State



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Highways) were built entirely with county equipment and men. The county road camp was established and maintained by the county to provide living quarters and meals for men working on the job.

Observatory

The observatory site on the mountain top comprises approximately 700 ac. and will include an airport to afford easy and quick access to the observatory for visiting scientists. Complete housing facilities for the staff will be provided and will include five cottages. Other major buildings will be two observatories—one for the giant 200-in. telescope and one for the 18-in. telescope which is now installed. There will also be a million-gal. water reservoir and a water tower 75 ft. high to provide adequate pressure. Special care is being taken to have all buildings termite, fire and earthquake proof.

The great telescope for which this construction and roadwork is being done will probably not be in operation until 1939 or 1940. The 200-in. glass is now being ground in a specially constructed building at the California Institute of Technology at Pasadena, and it is believed at least two more years will be required to reduce it to its final form with an exactness which allows for an error of only one-millionth of an inch.

Organization

Credit must be given to Ray Taylor, superintendent of the county prison camp; Jack Knighton, construction foreman for the San Diego County road department; to C. O. Richards, location and construction engineer, who had a very difficult job before him, and to all county employees of the road department for their efforts to bring this project to a successful completion.

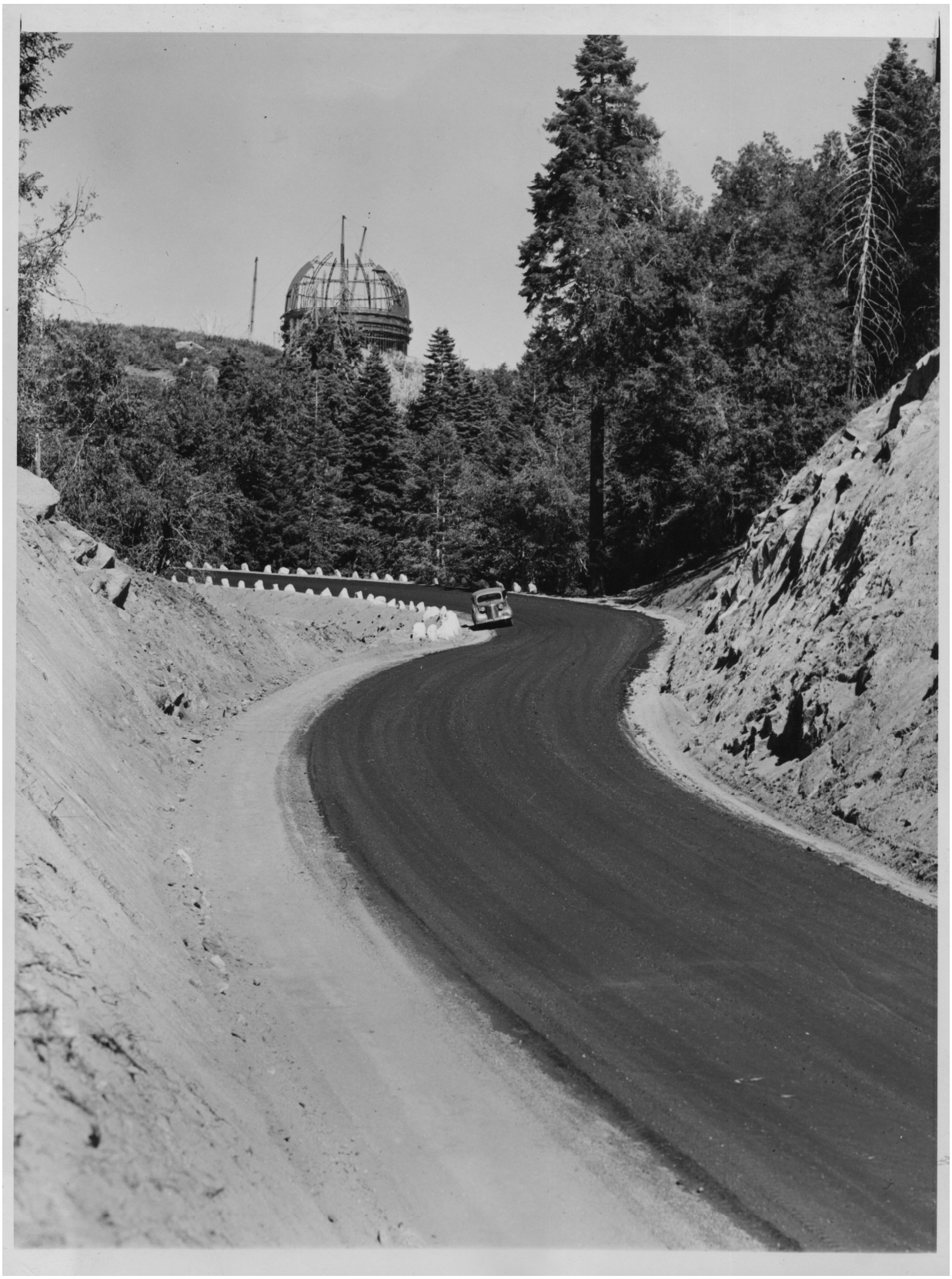
On October 9, 1937, the San Diego Sun reported on an automobile accident on Nate Harrison Grade [159]:

> For 100 feet, as their auto plunged over the side of (Nate Harrison) grade late yesterday, four San Diegans looked at death. Seven times their car turned over as it hurtled from the road to the foot of a ravine on the west side of Palomar mountain. And it all was caused by a rock in the highway, E.L. Claudfelter, the driver, told the sheriff's office. He, his wife, Margaret, and Mr. and Mrs. George Wagner, all of San Diego, received only minor injuries. They were treated in Escondido.

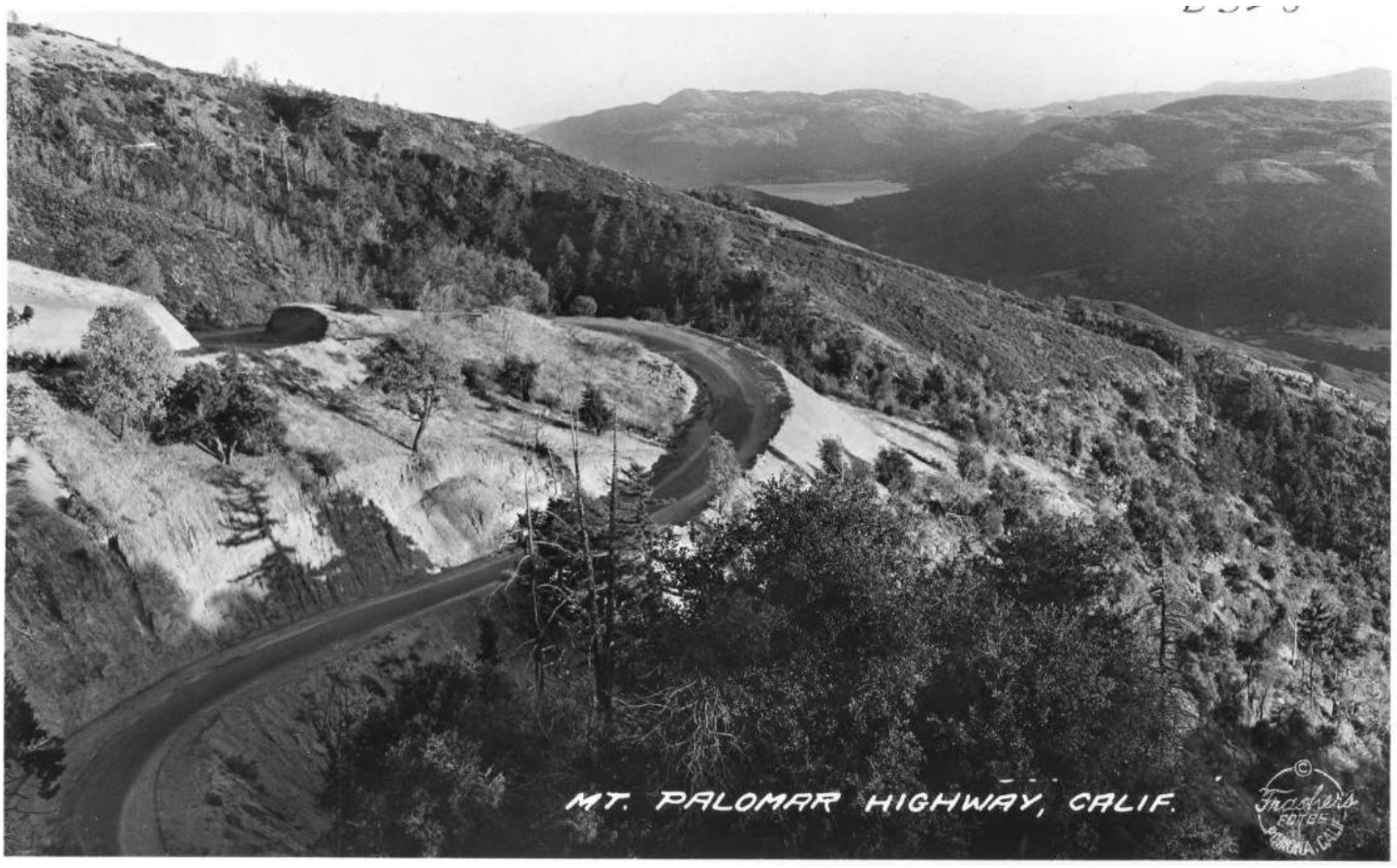
On October 21, 1937, the Coast Dispatch and The Progress newspaper of Encinitas reported on a San Diego County Board of Supervisors meeting including road business regarding Nate Harrison Grade [156]:

> Asked road department for report on conditions of (Nate Harrison) grade up west side of Palomar mountain, when J.H. Mansfield requested that the road be posted as unsafe for travel.

“MOVE MOUNTAINS” In building Mt. Palomar Observatory workmen changing the escarpment of Palomar Mountain, near San Diego, Calif., where scientists are supervising construction of a $6,000,000 observatory to house the 200-inch “eye” – world’s largest telescope. This work will prevent erosion of the million dollar highway being built up the side of Mt. Palomar to the Observatory, which will be commissioned in 1939. November 9, 1937. Newspictures, Inc. New York City.



MILLION DOLLAR HIGHWAY LEADS TO GIANT EYE. Because of the problems involved in moving not only the 20-ton mirror, but thousands of tons of steel, cement and other material to the top of Mt. Palomar, near San Diego, Calif., the aid of Federal, state and county governments was enlisted in building a new road up the mountainside to the Mt. Palomar Observatory, which houses the 200-inch eye -- the world's largest telescope. One million dollars was spent on the road construction and improvement program. Here is a picturesque view of the "Highway to the Stars." The $6,000,000 observatory will be commissioned in 1939. November 9, 1937. Newspictures, Inc. New York City.



South Grade shown on postcard with 1938 postmark

On February 7, 1938, the Daily Times-Advocate of Escondido reported on an automobile accident on Nate Harrison Grade [164]:

> Stan Robinsky – "Got a call to (Nate Harrison) Grade at Palomar yesterday and towed back a '33 model car which had rolled off the grade after colliding with another car. The six passengers were practically unhurt. After we got the car in, at the order of the owner, we chiseled off the running boards, fenders and other parts that would block the wheels and the six men were able to travel to Ventura, their destination."

On February 11, 1938, the Times-Advocate newspaper reported on the Nate Harrison Grade [157]:

> Would Abandon '(Nate Harrison) Grade'
>
> Plans for abandoning (Nate Harrison) grade up the western side of Palomar mountain were considered by the board of supervisors Monday. Before taking definite steps, the dis- (sic, words were omitted) the best way of proceeding toward the abandonment of one of the oldest routes of travel in the county. State and federal foresters are ready to take over the road, from the state highway through San Luis Rey valley, to the state park on the

mountain, and maintain it as a fire trail, on standards below those upon which county roads are kept, John W. Cole, assistant county highway engineer, informed the supervisors. Need of keeping the road open to public travel ended with completion of the new road up the south slope of the mountain, Cole wrote. He suggested the old route was hazardous and expensive to maintain. Whether the road shall be fenced off, merely signed as a forest trail, or kept open for those living on the mountain who must use it, will be determined after a report from the district attorney.

East Grade, April 1939 Dick Whittington photo, USC

South Grade, April 1939 Dick Whittington photo, USC

Road to Observatory (Canfield Road), April 1939 Dick Whittington photo, USC

The September 1939 issue of California Highways and Public Works reported on the South Grade road work.

Huge rotating dome of Palomar observatory for 200-inch telescope is 135 feet in diameter. The aperture is 30 feet wide.

Palomar "Highway to the Stars"

By WALTER BEUTHEL, Assistant District Highway Engineer

IN SOUTHERN CALIFORNIA is a road which is receiving constantly more attention and publicity, known as "The Highway to the Stars." It is appropriately named and of increasing importance far beyond its immediate locality. It is the road recently constructed up the south slope of Mt. Palomar, in San Diego County, to make possible the locating of an observatory on the mountain to house the largest telescope in the world.

The road may be said to begin at a point about five miles easterly from the little settlement called Rincon on Secondary State Highway 195, about 35 miles east of Oceanside. From an elevation of 2670 feet it rises by grades not exceeding 8 per cent and curves not sharper than 100-foot radius to an elevation of 5568 feet at the observatory plateau near the summit of the mountain, in a distance of about 12 miles. The roadbed width is 28 feet and the present surface is oil treatment.

In 1927, through the efforts of the late Dr. George Ellery Hale, a $6,000,000 grant was made by the General Education Board of the Rockefeller Foundation to the California Institute of Technology, for a new observatory to include superior astronomical equipment.

With the funds thus made available it was decided to construct a telescope having a 200-inch diameter mirror, twice the size of the Mt. Wilson instrument, the largest now in use. The advantage of the new telescope will be partly in its greatly increased light concentrating power which will make possible the photographing of more remote objects and show with greater detail and brightness known stars and nebulae.

Technical and mechanical progress of recent years will also make possible greater stability of the large parts necessary. Temperature control of the huge dome, in which the instrument will operate, will contribute to its effectiveness and improved bearings and supports to its ease of control. There will be additional smaller telescopes to supplement and assist in the observations.

The site on Palomar Mountain was selected as being most favorable because of the prevalence of clear nights throughout the year, minimum of turbulence in the upper air strata and distance from interfering lights of metropolitan areas—all contributing to the quality and quantity of the observatory work.

A condition of this location was that San Diego County provide an adequate road to the observatory site to transport the materials for the several buildings, the large mirror

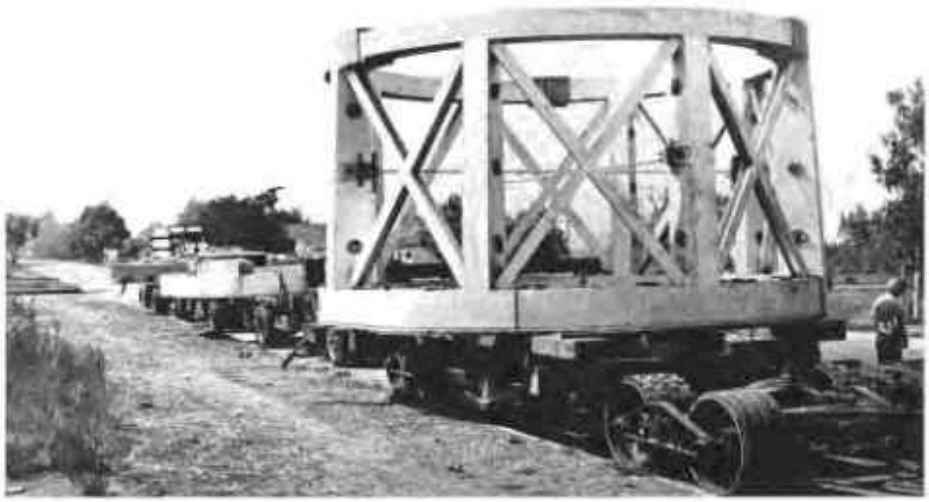
and large and heavy telescope parts when ready for installation, and thereafter to serve as necessary access to the observatory.

Construction of the road was undertaken in several units by State and county forces and with funds provided by the State, Federal Government and the county.

Old roads or more properly trails existed up the east and south slopes of the mountain but these narrow roads with their steep grades, sharp curves and poor alignment were not feasible even for improvement and were discarded for a new location up the south slope.

Late in 1934, when the design of the 200-inch mirror instrument was being completed, the matter of transportation of the parts was carefully considered by the designers and those in charge of its construction. The moving parts of the telescope weigh about 425 tons, and it was evident that besides the division into various pieces for design reasons and manufacturing convenience, a further division of certain portions would be necessary in order to get them from factories to the remote observatory site, which is 75 miles from San Diego, the closest port. Rail haul was not feasible because of the size of the parts, and because rail branches ended over 35 miles from the site.

The California Institute of Technology, in charge of the design and erection of the observatory, referred the matter to the Division of Highways, and after consideration of routes and bridge conditions by the State, the telescope design was completed, with the heaviest piece weighing about 54 tons and the largest 22



Transporting telescope parts over State Highways to Palomar Mountain.

Heavy loads on mountain grade. Center is part of telescope horseshoe weighing 54 tons. Behind it is a large girder.

Largest parts were moved on 4-axle low bed trailer.

feet in diameter and 14 feet high.

Roadbed width, gradient and curvature of standards which would make possible the use of vehicles capable of handling these loads were then considered and construction proceeded. The work was sufficiently completed in 1937 to allow safe moving of many loads of fabricated structural steel for the 135-foot diameter dome of the main building, together with other necessary materials.

In October, 1938, the metal parts of the telescope arrived at San Diego by ships from the factories on the eastern coast.

Details of the permits for the hauling were worked out on recommendations of the State authorities as the schedule of the work and the exact data on the vehicles and loads became available.

The route selected included eight bridges on State highways and two on county roads, all newer types and of recent construction. Absence of weak bridges, width of roadbed and most favorable traffic conditions were considered in the choice of route from San Diego to the beginning of the "Highway to the Stars." This 12-mile portion has the steepest grades but no large bridge structures.

As the parts were unloaded from the ship's deck at San Diego an indication of their weight was observed when the rather sizable freighter listed very apparently as each piece was hoisted from the deck by a large railroad crane.

The loads were the heaviest unloaded from a ship at San Diego and also the heaviest moved over highways in this vicinity. A large four-axle, low-bed trailer supported the greatest weights and with two large trucks pulling and another pushing on hills the trip was made to the mountain and then up "The Highway to the Stars" in about two days' time for each load.

The State Bridge Department designated the definite lanes of certain bridges to be used, limited the speed, prohibited other loads on the bridges at the same time and checked the stresses as the loads crossed. The traffic was controlled through the cooperation of State and city police and the moving was accomplished without accident or noticeable damage to road surface or structures.

Road improvement projects

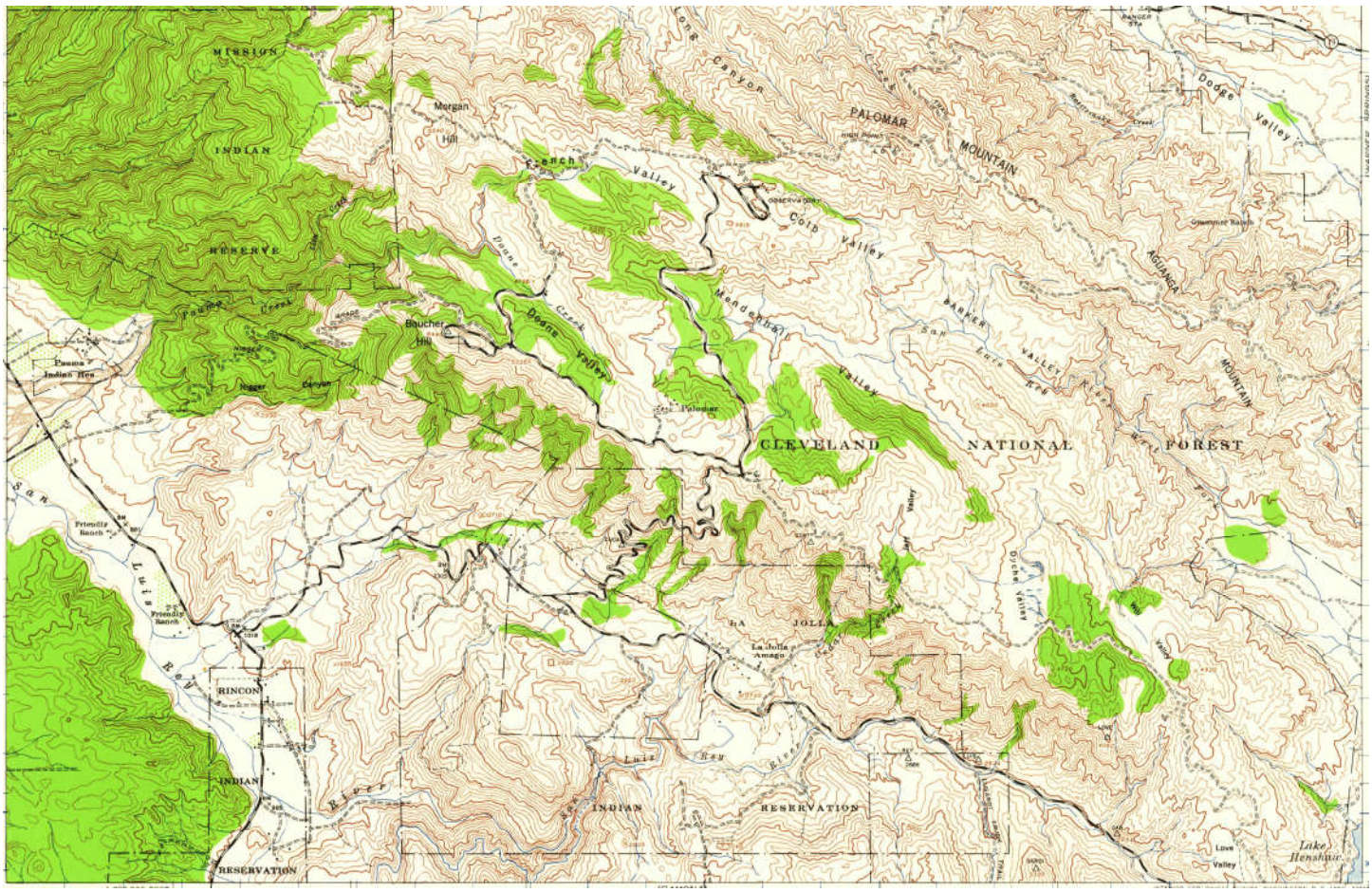
(Continued on page 24)

Section of new highway on Palomar mountain grade.

Map of State Highway 101(X) and County Roads (hatched) over which telescope parts were hauled from shipside at San Diego.

County road to observatory site before rebuilding.

The 1939 U.S.G.S. Palomar Mountain map below shows the status of paved and dirt roads on Palomar Mountain at that time. South Grade is paved to the telescope and the East Grade and Nate Harrison Grade are dirt roads.



On November 26, 1940, the San Diego Union reported [109]:

> County May Move Palomar Camp to Laguna Mountain
>
> Removal of the county industrial road camp from Mt. Palomar to Laguna mountain, so its crews may aid in reconstruction of the highway from Laguna junction, on Highway 80, to the Laguna camp grounds, was seen as a possibility yesterday, when N.J. Farrell, Cleveland National forest supervisor, submitted plans for the realignment to the county supervisors. … The prisoners at the Mt. Palomar camp performed much of the work on the south slope grade to the Palomar observatory. Since completion of the grade, R.B. Taylor, camp superintendent, has been directing operations on a new road from Palomar crestline to the state park on the mountain.

On December 9, 1940, the Tribune-Sun reported on the East Grade [118]:

> Action on Camp Change Delayed By Plea for Palomar Road Work
>
> A special plea that the old east grade dirt road on Mt. Palomar be converted into a first class highway today interrupted a step by the board of supervisors to consider moving the county industrial road camp from Palomar to the southern part of the county. A petition bearing numerous names, including that of Dean Howell, new supervisor-elect for the north district, was submitted by R.W. Tillinghast, Palomar, against moving the camp until the east grade "has been put in shape for paving." The board was on the point of approving a resolution asking federal and state highway agencies to signify their intentions concerning the proposed Jamul-Jacumba shortcut highway between San Diego and Imperial valley. The board indicated the county wished to be prepared to move the camp to a site suitable for construction work on the new short cut if assured the route will be acceptable for national defense, truck traffic and other purposes. Rev. George W. Williams, owner of "Stardust" cabin on Palomar, urged the board to make sure that all roads leading to Palomar are "polished and repolished." Referring to the observatory, Father Williams said "this great window of the universe is going to lift San Diego county into special prominence," as world attention is fixed on scientists peering into the heavens "to find out whether space is curved or not." He said widespread interest would draw much traffic, and the county should pave the way. John W. Cole, county road engineer, said the industrial prison camp was "standing by," with all work done on projects prepared for it, waiting for the next assignment. Cole and E.W. Settles, north road district superintendent, have inspected possibilities along the old east grade and while they find present alignment unsuitable for high standard requirements, have made preliminary surveys for a better route between Love valley, about two miles up the mountain above Henshaw lake dam, and Crestline, point where Palomar roads form a junction. "The old grade has a high maintenance cost," Cole said. "Forest fire burns on the mountain have washed down much silt, making troublesome bogs." The board indicated it would examine survey plans. …

On December 11, 1940, the Tribune-Sun reported an anecdote regarding the Nate Harrison Grade and East Grade [119]:

> Heaven's Detour!
>
> PASTOR HELL-BENT
>
> 'Glory Road' Rough
>
> Old timers on Mt. Palomar, unknowingly anticipated San Diego county's "Highway to the Stars" years ago, when the world's greatest observatory was not even a dream project, according to a story heard by the board of supervisors yesterday. The poetic name "Highway to the Stars" is being applied in chamber of commerce literature to the county's recently completed paved road which leads from San Luis Rey river valley up to Crestline and across the mountain to the great observatory. But many years ago, when the steep and perilous (Nate Harrison) grade on the west slope of the mountain was the "shortcut" to the top from the coast, the pioneers of the vicinity erected a warning sign at the bottom. It read: "This is the way to heaven." Then there was an arrow pointing toward the east grade, and under it the direction: "Take the other road." Rev. George W. Williams, who calls his Palomar cabin "Stardust," laughed when he came to this point as he told the story to the supervisors. His eyes twinkled. "And I always took the other road," he confessed.

On December 18, 1940, the San Diego Union reported on the East Grade [110]:

> Supervisors Ask Survey on New Palomar Road
>
> A survey and cost estimate of a proposed highway from Lake Henshaw dam to Crestline, on Palomar mountain, was ordered yesterday by the county supervisors. The proposed road, on an almost entirely different route from the present east grade dirt road, would provide a second first-class highway to the observatory.
>
> CAMP MOVING OPPOSED. R.B. Taylor, industrial road camp superintendent, spoke against a proposal to move the camp from its present location on the Mendenhall ranch, San Luis Rey river valley, to a place where operations on the new highway could be conducted at least until next spring. An earlier suggestion that the camp be moved to Laguna junction, on Highway 80, to provide labor for a proposed Jamul-Jacumba short cut on a new alignment of the highway from San Diego to Imperial valley, was brought up by T. LeRoy Richards, supervisors' chairman. … Question of

moving the camp was left unsettled and Taylor was instructed to put crews to work on culverts and winds on Iron Springs creek, Mt. Palomar. …

On January 14, 1941, the Tribune-Sun reported on the East Grade [120]:

Improving Highway

Improvement of Mt. Palomar east grade, an old winding dirt road, to county highway standard apparently was assured when the board of supervisors authorized R.B. Taylor, superintendent of the industrial road camp, to obtain a site for the camp on the line of the projected new route. The board also yesterday ordered a working survey from foot of the grade, at Lake Henshaw dam, to Love valley. Taylor said he would assign a crew to prepare the site, while other crews maintain the south slope grade, main highway to the observatory. The camp will be moved from Mendenhall ranch, San Luis Rey river valley.

On January 27, 1941, the Tribune-Sun reported on the East Grade [121]:

Prison Camp Site ‘Hard To Find’

Difficulty in finding a spring-fed site upon which to move the county industrial road camp, halfway on the proposed new route for Mt. Palomar east grade, was reported to the board of supervisors today by R.B. Taylor, camp superintendent. Recently the board, after ordering a survey for realignment and reconstruction of the old east grade dirt road, authorized Taylor to choose a suitable location somewhere along the 14-mile route, preferably midway. Taylor has found that a site may not be available in Will valley, midway, and that water may be insufficient in Love valley, lower down. Farther up the mountain, near Salmons ranch house, water flows in quantity, Taylor said. He was to ascertain if a site could be obtained. He is expected to move the camp by next April. For several years the camp has been near the Mendenhall ranch house, San Luis Rey river valley, at the south foot of Mt. Palomar. Camp crews aided in constructing the south slope grade on the highway to Palomar observatory.

On February 25, 1941, the San Diego Union reported on the East Grade [122]:

> Palomar Road Survey Ordered
>
> Survey of the proposed realignment of the Mt. Palomar east grade road, from the crest to Love valley was authorized yesterday by the county supervisors. When the survey is completed, crews from the county's industrial road camp will proceed at once with construction. Supervisors Dean Howell and David Bird inspected the grade last week and reported that the work could proceed immediately, as the route from the crest to Love valley will follow closely the present alignment and no additional rights-of-way will be required. From Love valley to the bottom of the grade, however, extensive new easements will be required for the altered alignment. Howell suggested that these could be obtained by A.W. Daniels, county right-of-way agent, while work on the upper part of the grade is under way, so that construction of the entire grade might proceed as rapidly as possible.

On May 27, 1941, the Tribune-Sun reported on the East Grade [123]:

> Two Miles Graded
>
> Inmates of the county industrial road camp at Mt. Palomar have graded two miles of the first and longest highway project in a new list of three planned for camp crews, R.B. Taylor, camp superintendent, reported to the board of supervisors yesterday. The work is being performed on realignment of the east grade on Palomar. When completed, the route will provide a loop tour across the mountain, passing the observatory. Supervisor Dean Howell, of the district, said that by maintaining the camp at its present location, Mendenhall ranch on the south site of the mountain, crews would be enabled to go to two other projects after completing the east grade. Howell's plans call for completion of Sole (Cole?) grade, south of the camp, and realignment of the road from Pala to Riverside county line, west of camp.

On November 8, 1942, the San Diego Union reported on the East Grade [124]:

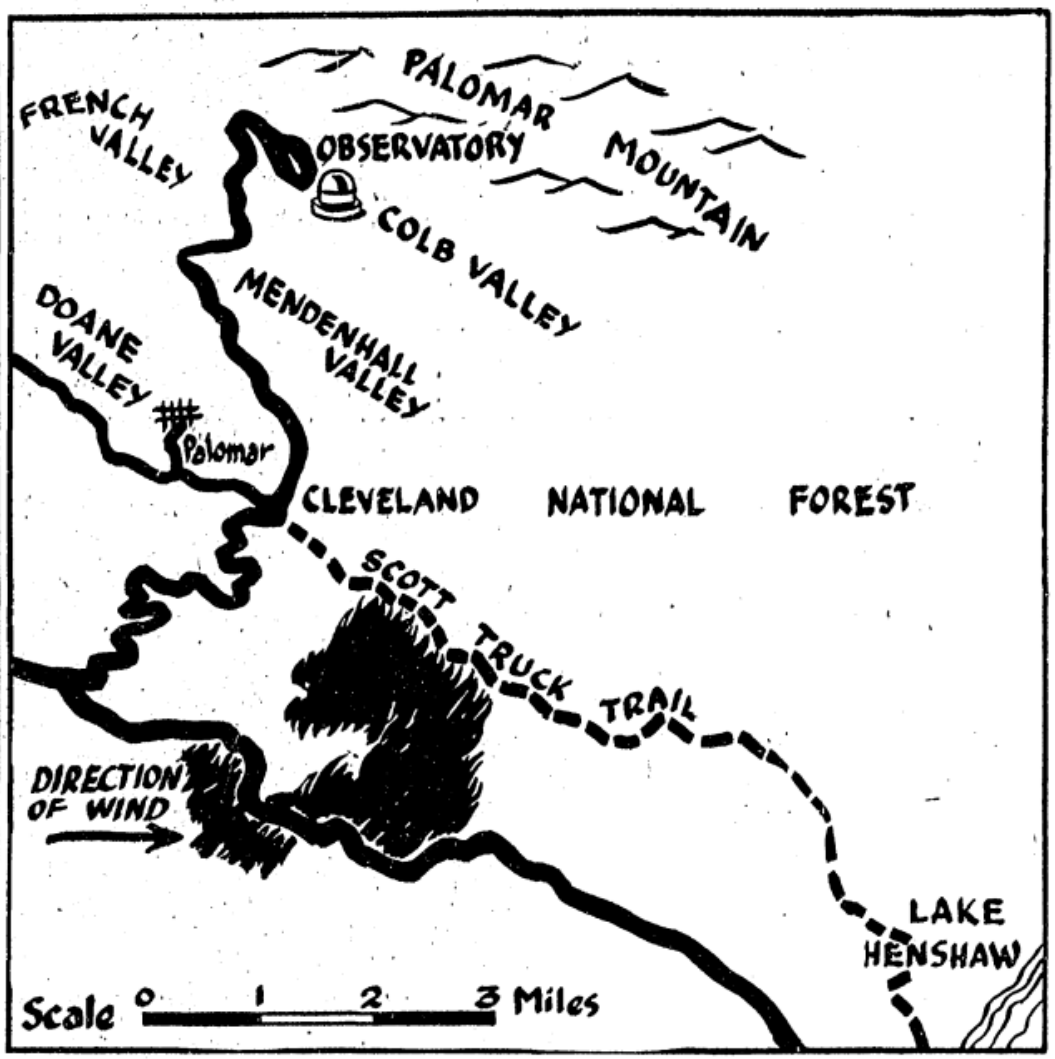
> County Surveyor O.K.'s Easements For Palomar Road
>
> Acceptance of easements from the San Diego County Water Co. which will permit realignment of the Palomar mountain east grade, was recommended to the county supervisors yesterday by Ernest R. Childs, county surveyor and ex-officio road commissioner. Childs reported the road easements were predicated on condition the county construct 1400 lineal feet of wire fence along the water company's property and build and maintain a culvert under the highway where the right-of-way crosses the stream channel below

Henshaw dam. The road department said the culvert, designed to carry the estimated normal releases of water from Lake Henshaw, would cost $9800, but that work on this project would have to be delayed until after the war. It also will be impossible to proceed with the proposed road realignment during the war, but Childs recommended that the easements be accepted so that the project can be started when labor and materials again become available.

Highway to the Stars shown on postcard with 1944 postmark

On July 28, 1947, the San Diego Union reported on a Palomar Mountain fire, with the East Grade dirt road referred to as the Scott Truck Trail [111].

Incendiary Fires Sweep Over 1800 Acres in Palomar Area



Federal and State Forestry firefighters are relying on the Scott truck trail to halt progress of incendiary fires burning out of control across 1800 acres of brush and timber in Palomar Mountain area. The trail is a natural barrier against the flames, which are being pushed steadily eastward by 20-mile-an-hour winds. Forestry officials said the Palomar observatory and resort area are protected from fires by Doane, Mendenhall and Colb Valleys. More than 700 men are battling the fires.

700 Men Battle Flames Along Six-Mile Front

A series of incendiary fires last night was sweeping through nearly 1800 acres of brush and scrub timber in the Palomar Mountain area and a small section of Cleveland National Forest. More than 700 Federal, State and military firefighters battled to establish a six-mile defense line along the Scott truck trail paralleling the flames.

Neither the Palomar observatory nor the Palomar State Park resort grounds are presently imperiled by the fires, which were being pushed east and partly south by a 20-mile-an-hour wind, U.S. Forest Ranger R. H. Blood said.

INCENDARISM INDICATED

"These fires are undoubtedly of incendiary origin," Blood declared, "because they began in isolated, dry grassy areas and within a short period of time. The terrain also is about the most difficult for firefighters to approach in that district.

"Also, we found our phone lines were cut maliciously at three places, miles apart, while Federal and State foresters were working to bring the blazes under control. "Without radio communications, we would have been messed up."

STARTED SATURDAY

Two of the major fires were started Saturday at widely-separated points in the vicinity of Cuca, six miles south of the State Park. Before they were brought under control, another large incendiary blaze began yesterday on

On September 7, 1947, the San Diego Union reported on the East Grade [125]:

> Palomar Road Closing Recommended to Board
>
> Closing of the east grade on Palomar Mountain from Nov. 1 to early April, 1948, while prisoners are working on the highway, was recommended to County Supervisors yesterday by W.M. Bonham, Industrial Road Camp Superintendent. Bonham reported that travel on the east grade during the winter months is light and that "the closing of this road would cause very little inconvenience to the public." He said a detour around the construction work is not feasible because of the rough terrain and steep slopes.

On September 9, 1947, the San Diego Union reported on the East Grade [126]:

> Palomar Grade Closing Urged
>
> Objection of Dean Howell caused County Supervisors yesterday to file a request of W.M. Bonham, Industrial Road Camp Superintendent, that the East grade on Palomar Mountain be closed during the winter months while the road was being widened and improved by prison labor. Bonham asserted the nature of the terrain precluded making a detour around the construction work. "They may be working on that road for five years and I see no reason why it should be closed to traffic," said Howell.

On October 11, 1948, the Daily Times-Advocate reported on an automobile accident on the Nate Harrison Grade [160]:

> … a severely injured motorist was helpless at the bottom of a canyon with his dead companion for 18 hours Friday night and Saturday after the pair's car plunged over a 600-foot cliff on Palomar mountain, about six miles from Highway 195 on (Nate Harrison) grade, ten miles east of Pala.

On October 15, 1948, the Weekly Times-Advocate reported on an automobile accident on the Nate Harrison Grade [165]:

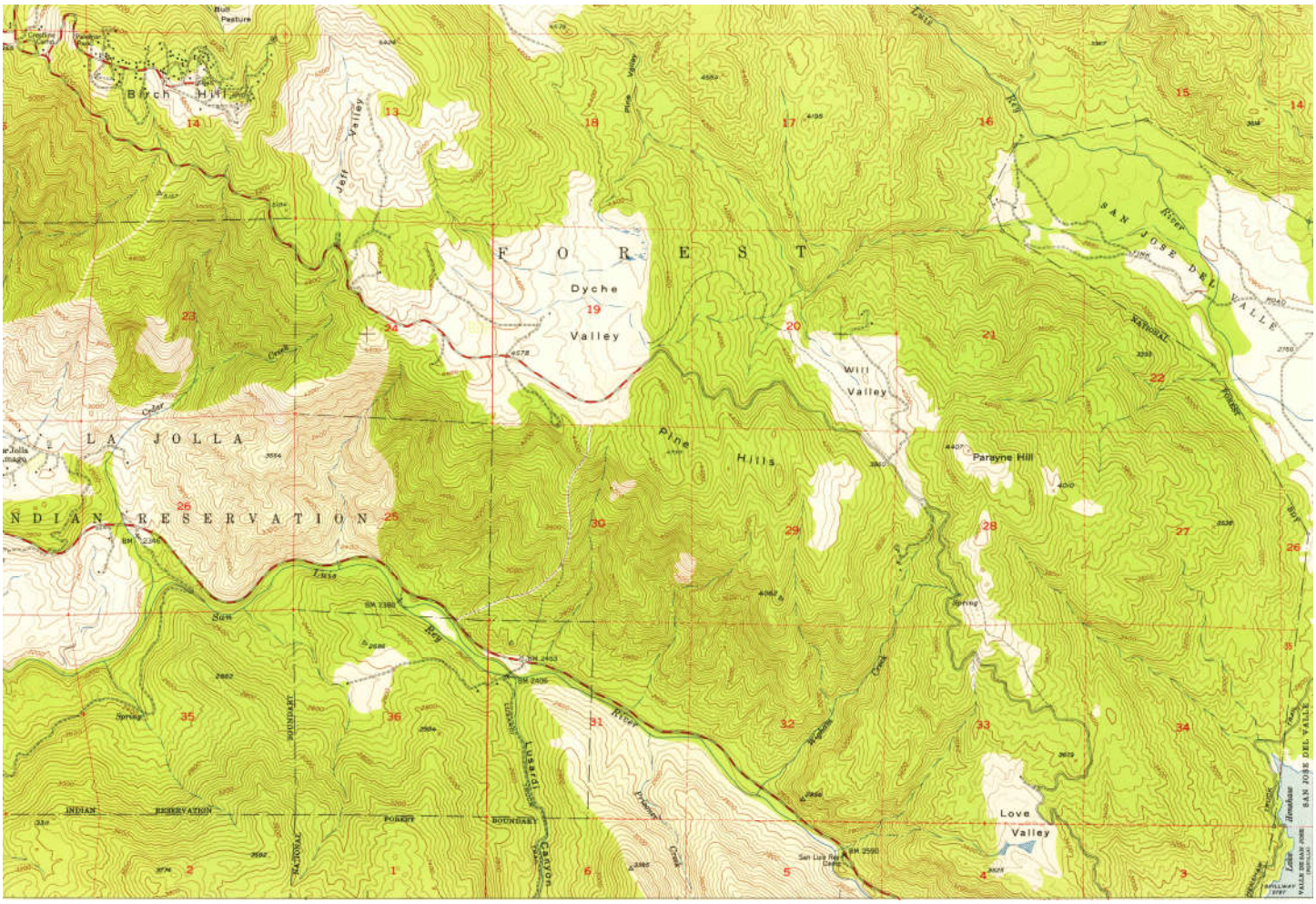
> In the second accident over the weekend, a severely injured motorist was helpless at the bottom of a canyon with his dead companion for 18 hours Friday night and Saturday after the pair's car plunged over a 600-foot cliff on Palomar mountain, about six miles from Highway 195 on (Nate Harrison) grade, ten miles east of Pala. Donald K. Palm of the Palm Mortuary and Virgil Parks of the state highway patrol organized a group of forestry men. The men strapped the body of the dead man and injured man to a sled and pulled them out with a 150-foot coil of rope. Harry Eugene Garrett was the dead man, while his companion, William H. Carroll, a marine master

> sergeant from Camp Mathews who lives in Vista, suffered a fracture above his knee and multiple abrasions and bruises. Carroll, when reached, said he had been conscious only part of the night. He said both he and his companion had been thrown from the car as it somersaulted into the gorge. Carroll said he had been flung from the car about 500 feet from the drop-off, while Garrett, the driver, had stayed with the car for about 900 feet. Carroll said he had picked up Garrett in Vista Friday and at the time of the accident was demonstrating the vehicle, which Garrett had wanted to buy. The two had gone up the regular Palomar Mountain road, he said, and were returning by the (Nate Harrison) grade after dark when the car swerved from the road and plunged over the side. Deputy Coroner Dave Bone described the mountain accident as "the worst I've ever seen" and said the automobile was totally demolished. Carroll, first taken to Community Hospital at Escondido, was transferred to Naval Hospital. ...

On July 1, 1949, the Fallbrook Enterprise reported on fire hazard closures or restricted use within the Cleveland National Forest and noted that certain areas and roads within the forest will be open to public use, including "the dirt road from Crestline to Lake Henshaw, commonly known as the East Grade [127]."

On September 21, 1949, the Tribune-Sun reported on San Diego County considering moving the County's Palomar Road Camp from Cuca to a former State Road Camp near Lake Henshaw, noting that "the new site will be 10 miles closer to the Palomar east grade where prisoners are working … [128]."

The 1949 U.S.G.S. Palomar Mountain map below shows East Grade as being paved from Crestline at the top down to Dyche Valley and then dirt road down to Lake Henshaw.



On May 25, 1953, the Escondido Daily Times-Advocate reported on the East Grade [129]:

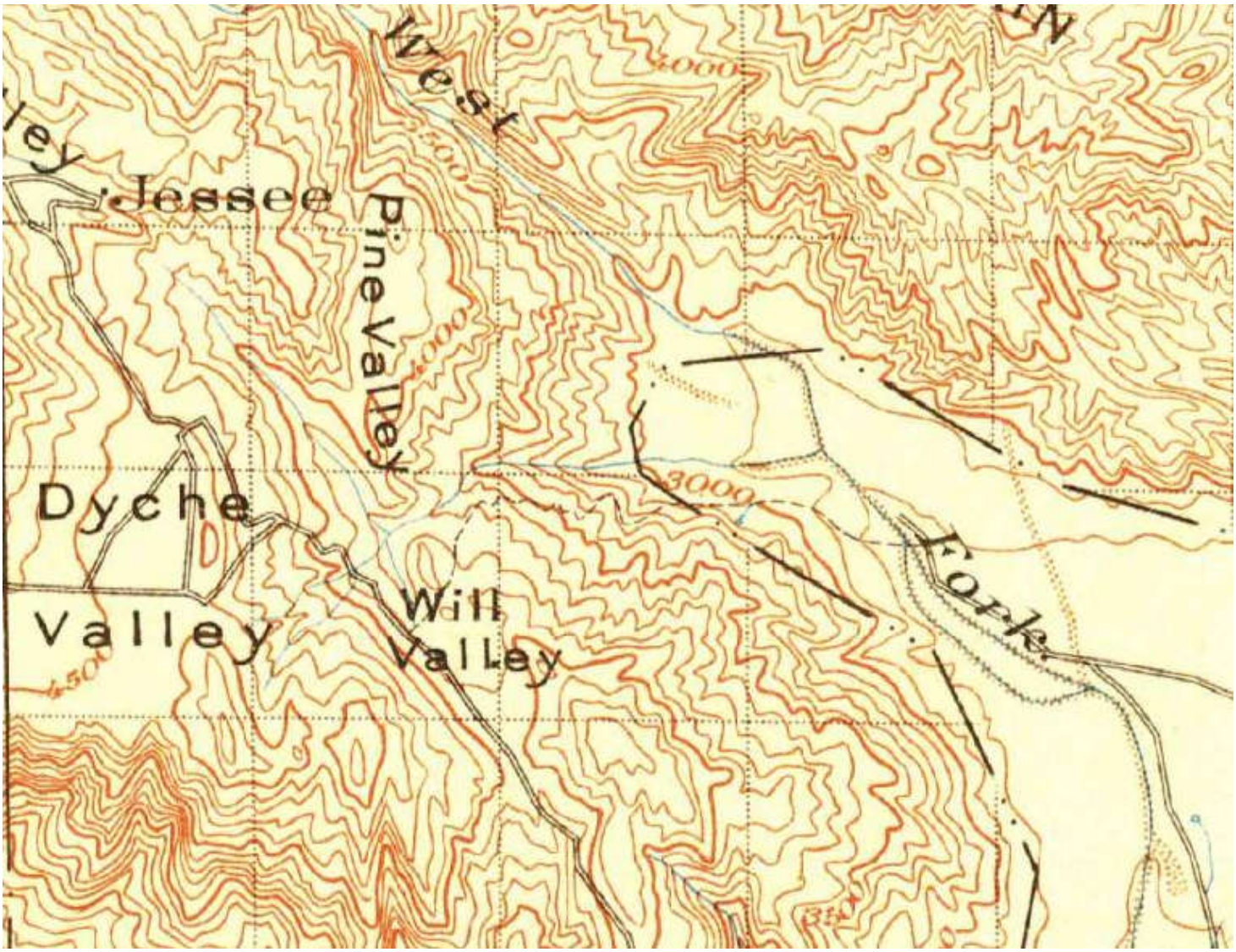
> Escondidans who haven't driven from the Palomar mountain park junction over the east grade to Lake Henshaw recently are missing a treat. The road has recently been paved and is in fine shape.

On July 16, 1953, the Escondido Daily Times-Advocate published Palomar news including that "the oiling of east grade is now finished and the new road open to traffic [130]."

FINK'S ROAD

Arriving in 1895, Winbert Clarence Fink lived in the Will Valley area on the east side of Palomar Mountain for thirty-seven years, … a long stretch compared to other early residents of Palomar Mountain. In his 'My Palomar' memoir, Robert Asher wrote about the road that Fink built to his land in Will Valley [23]:

> Then, too, he built a fairly good road all the way up from Warner's Ranch all by himself. Anyone having knowledge of the cost of the county-built road up from Henshaw Dam would know that this one thing would mark Fink as a remarkable man.



Winbert Fink's road from the West Fork of the San Luis Rey River up to Will Valley. Fink's road is marked by dashes, starting at the "F" in "Fork" and running up to the "W" in "Will Valley."

taken from the 1903 U.S.G.S Ramona quadrangle map

a horse drawn slush scraper www.lawfamilyhomestead.com

Robert Asher writes [23]:

> Fink was working his road, so I went down with him one morning. He had an enormous horse and was working him single that morning with a slush or shovel scraper. The sight of little man, big horse and cantankerous scraper caused me to offer my help. This offer was refused at first, but after a second misdumping of the scraper, Fink admitted that I might be of assistance if I would lead the horse where he should go at the outer edge of the fill. I held the bridle firmly, close up to the creature's mouth. Fink said, "Giddap," and we were off. But ole hoss had his own ideas about where to go, and in spite of all my tugging and pulling at his jaws, he went that way and not anywhere near the edge of the dump. Fink threw over the scraper with its load and we tried again, with the same results.
>
> "Why don't you lead him nearer the edge?" rasped Fink.
>
> "Can't," I said. "He's too much for me! I pulled just as hard as I could."
>
> "Here," ordered Fink, "you take the scraper and I'll attend to guiding him." So, resigning as commander of cavalry, I went over to the scraper. "Hold up the handles a little until you get a load," ordered my friend. "Then press down and don't dump until I give the word."
>
> We started off fine and dandy. I got the load on the scraper and pressed down. Just then the front edge of the scraper caught on a snag and the handles jerked upward, nearly throwing me off my feet. Regaining my equilibrium, I struggled desperately to hold down.

"Whoa! Whoa!" shouted Fink at the horse. "Don't dump it yet," he shouted at me.

It Takes Brawn to Handle a Scraper

Municipal Record (City Commissioners, Salt Lake City, Utah) Volume 4, Issue Number 5, June 10, 1915

But old horse kept on going. Over went the scraper, dumping itself, with me still struggling desperately to hold it back. At that moment my heart jumped, then went off on a fluttering spell. I managed to stagger to the bank and sank down, heart still aflutter. It kept on fluttering so long that I began to wonder if it ever would settle down again. Fink left the horse and rushed over to me. I guess he was more scared than I was, however, friend heart quit acting up and I was soon all right. But Fink said, "Never again! You go back up to the house and lie down."

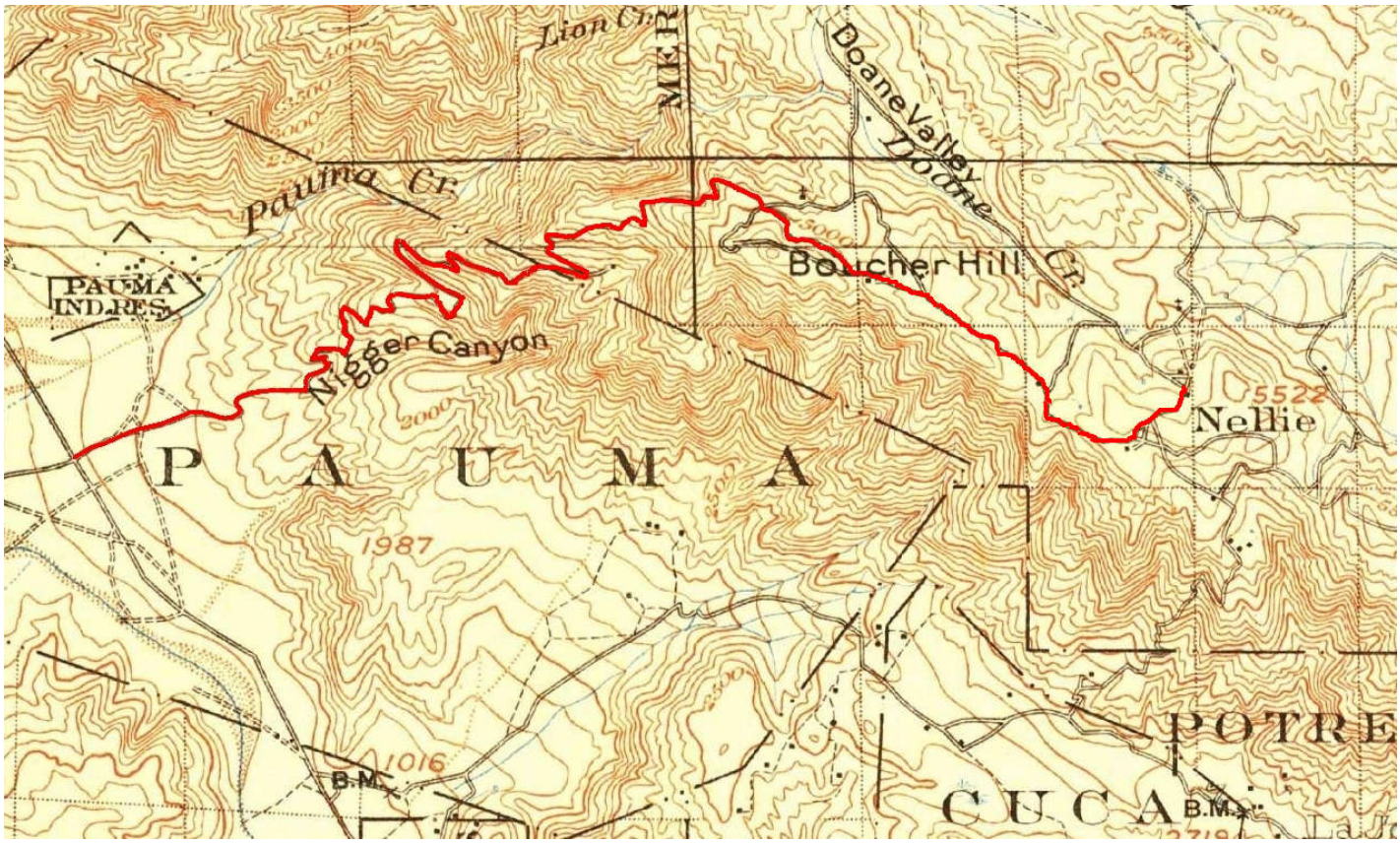
RACING UP PALOMAR MOUNTAIN

Catharine Wood writes [1]:

> Nate Harrison Grade offered a favorite climb in early days of motoring for testing speed and endurance of various makes of cars, and became widely known in automobile circles.

Timed hill climb races up Palomar Mountain's Nate Harrison Grade on the west side started in 1912 and ended about 1925 [28]. A proposed race up Palomar Mountain in 1908 did not happen due to disagreement on the terms of the race [28].

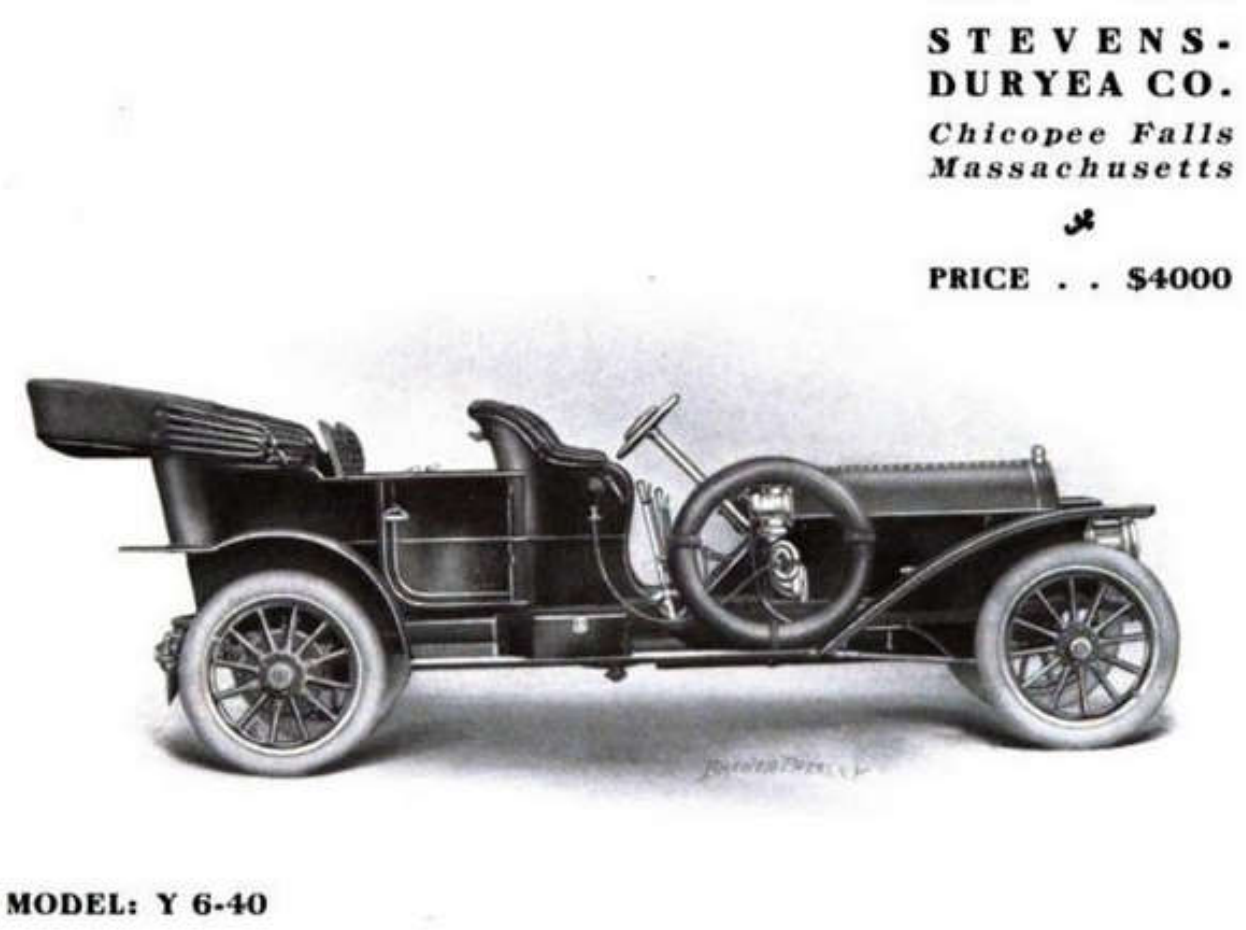
The Palomar hill climb route up the Nate Harrison Grade started at a gate a mile in from the Pauma road and ended at the Hotel Palomar aka Baileys aka Nellie.



Palomar hill climb race route on the Nate Harrison Grade in red
USGS 1903 Ramona map

On July 6, 1912, the San Diego Evening Tribune reported on a record run up Palomar Mountain by Fred W. Jackson [32]:

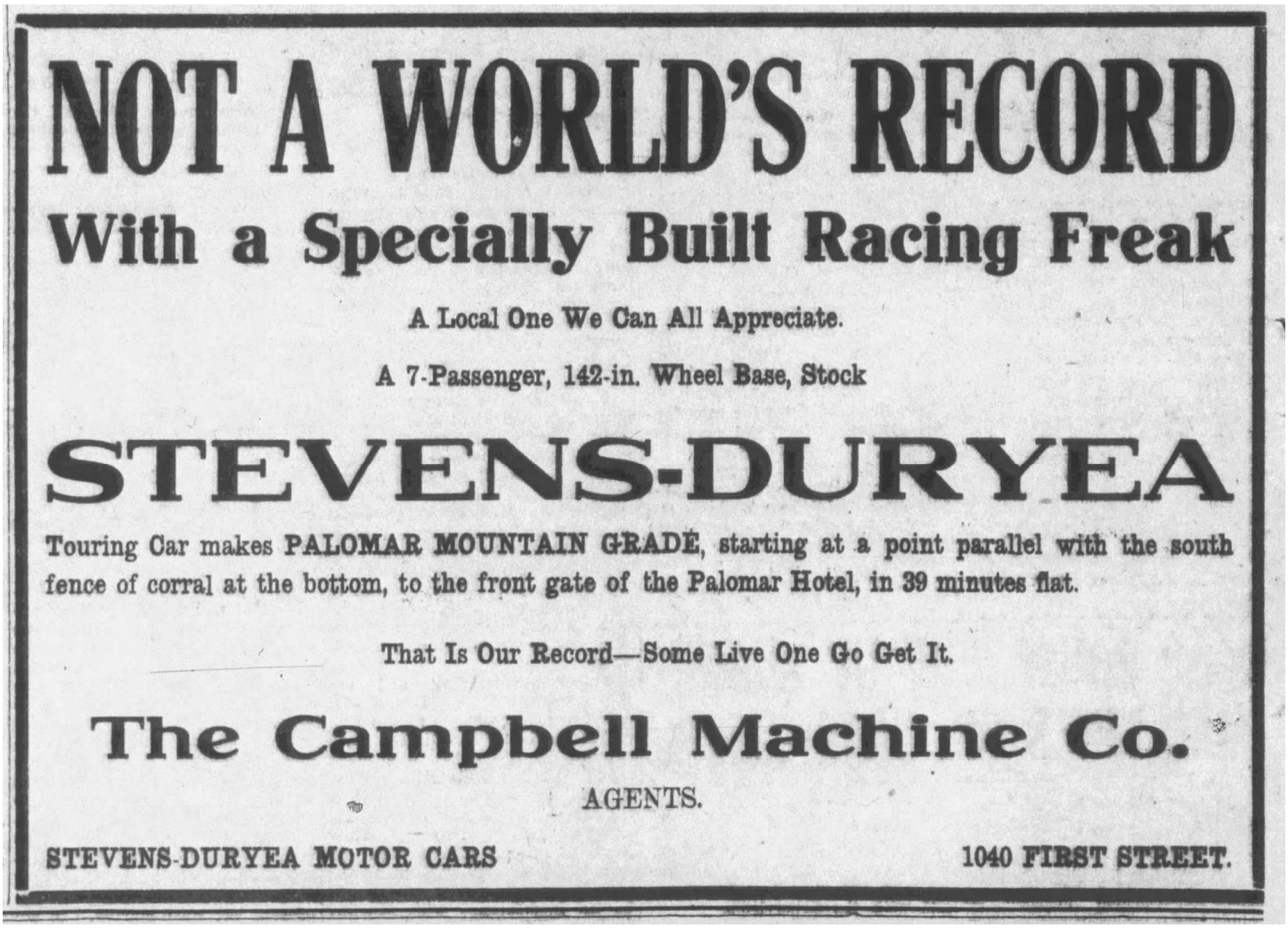
> REMARKABLE RUN IS MADE BY AUTO
>
> F.W. Jackson Drives Fully Equipped Seven Passenger Stevens-Duryea Up Palomar Grade to Hotel in 39 Minutes
>
> F. W. Jackson, in his seven passenger, six cylinder model Y Stevens-Duryea touring car, set a record recently which, to the interested motorist who has taken the trip and persons familiar with Palomar Grade, verges on the brink of the unbelievable. Leaving San Diego in the afternoon, the run to the foot of the grade was made in good time. Passengers in the car were Mr. and Mrs. A.L. Verner, Mrs. Jackson and Dave Campbell. Starting with a line parallel to the south side of the corral fence at the foot of the grade, Mr. Jackson drove his Stevens-Duryea up the steep grade to the gate at the hotel grounds in the remarkable time of thirty-nine minutes flat. The distance is twelve and one-half miles and is practically one continuous grade which the Stevens-Duryea made without a stop.



A good idea of the steep grade is furnished by the altitude records of the geological survey. At the bottom of the grade the altitude is 1000 feet and at nine miles the altitude is 5000 feet, a rise of 4000 feet in nine miles. Motorists will undoubtedly concede the record made by Mr. Jackson's car is wonderful. The time made by the Stevens-Duryea was "caught" by a stop watch held by Mr. Verner, a person not interested in this car as he drives a machine of another make. The stop watch time tallied exactly with the clock on the dash of Mr. Jackson's car. The car which made this good record – a record which will undoubtedly be an enviable one – was not a fully stripped machine, being a fully equipped seven-passenger Stock touring car with wheelbase of 142 inches – the longest in the word. Besides the five passengers, the car carried two extra casings on running board, a large air bottle, tire chains and sundry equipment, also baggage of party for trip of two days.

On the return trip the car showed the same great speed and power, the run from Nellie via Warner's ranch, Ramona and Lakeside, to Mr. Jackson's residence being made in three hours and forty-five minutes elapsed time. On the incoming trip down the Smith mountain grade [Palomar Mountain's east grade], the descent was 1000 feet in three quarters of a mile. From Lakeside Inn to the normal school, the time was twenty-eight minutes.

In speaking of the trip, Mr. Jackson said: "This run was similar to numerous other ones I have made in my Stevens Duryea which I purchased in June 1909. Considering the fact that the car did not show any signs of boiling, did not miss an explosion, and no attempt was made to reduce weight, the record of this run is all the more remarkable. When we arrive home, the radiator was refilled, a gallon more than filling it."


NOT A WORLD'S RECORD
With a Specially Built Racing Freak
A Local One We Can All Appreciate.
A 7-Passenger, 142-in. Wheel Base, Stock
STEVENS-DURYEA
Touring Car makes PALOMAR MOUNTAIN GRADE, starting at a point parallel with the south fence of corral at the bottom, to the front gate of the Palomar Hotel, in 39 minutes flat.
That Is Our Record—Some Live One Go Get It.
The Campbell Machine Co.
AGENTS.
STEVENS-DURYEA MOTOR CARS
1040 FIRST STREET.

San Diego Sun, July 6, 1912, page 2, column 4

The San Diego Union announced a Palomar Mountain hill climb event on July 21, 1912 [34]:

Motorists Showing Interest in Contest in Which Valuable Prizes Are at Stake

In another week or ten days local motorists and motor car dealers will be tuning up cars for a month's carnival of speed, with the course laid from San Diego to the Palomar hotel. The cup and medal offered by Percy Benbough will be the prizes that will go to the driver making the best time on the run between August 1 and September 30. The conditions remain the same as were published in the Union as last Sunday. Mr. Benbough is determined to have the prizes worth striving for and has given Jessop & Sons, jewelers, orders to turn out the best medal ever manufactured in San Diego. From the top bar of the medal, which will be of gold and beautifully etched with an appropriate design, will be suspended a pendant with a pure white diamond setting. The medal is for the best time between Mr. Benbough's store at 1129 Fifth street and the Palomar hotel and the cup for the best time up the grade.

> The record time from the foot of the grade to Palomar hotel is held by F.W. Jackson's Stevens-Duryea. It whirled up the steep and contourneated grade in thirty-nine minutes, but as the feat was performed before the prizes were offered contestants for either medal or trophy will not be required to beat that time to win.

The San Diego Evening Tribune ran this item on September 21, 1912 [35]:

> MANY CARS SENT OVER PALOMAR FOR RECORD
>
> Contest for Benbough Trophies Attracts Entrants; Stevens-Duryea Again Makes Fast Time; Goes Up in 48 Min.
>
> The trip up Palomar mountain remains a favorite one with local motorists and several cars have within the last two weeks made exceptionally good time up the grade. It is reported that a few have climbed the grade close to fifty minutes but none excepting a Stevens-Duryea has approached the mark of thirty-nine minutes made two months ago by that car. F.W. Jackson's Stevens-Duryea, the same car which made the record of thirty-nine minutes, has made the best time since the contest for the Benbough trophies was begun. With Dave Campbell at the wheel and Mr. and Mrs. Jackson as passengers, this car was driven from the foot of the grade to the hotel in forty-eight minutes recently. This time is considered to be fast enough to win the trophies but if it should be lowered it is probable that the Stevens-Duryea will be sent after any record that may be set.
>
> The distance from San Diego to the hotel is 70.4 miles by speedometer measurement. The table of distances follows: Normal school, 3.2; Head ward St. Louis, 5.4; Bridge at Old Mission, 7.0; Top Murphy Canon, 12.4; Old Virginia P.O., 17.7; Top Poway grade, 19.5; Bottom Poway grade, 21.2; Merton, 23.2; Bernardo store, 31.5; Escondido garage, 36.5; Foot Valley Center grade, 41.2; Top Valley Center grade, 44.9; Turn left, 48.0; Straight ahead to Cole grade, 48.7; Cross San Luis Rey river, 56.7; Corral foot Palomar grade, 58.2; Water trough, 63.4; North side of mountain; 66.3; Palomar hotel, 70.4.

In a 1957 interview, William G. Halbritter said in oral history [33]:

> Well, I tell you, they didn't have racing up at Mount Palomar, but Percy Benbough put up a trophy after the Phoenix race. Dave Campbell won it. He drove the Phoenix race for Daniels of Coronado, I think. Daniels had a Stevens-Duryea and Dave Campbell fixed that car and put it in the San Diego-Phoenix race, and won it. After that race Percy Benbough put up a

> trophy for the fastest car up … Nate [Harrison] Grade. Dave Campbell won it and he held that title for about ten years.

In a 1959 interview, David C. Campbell said in an oral history [31]:

> For the Palomar Race we used Fred Jackson's Stevens-Duryea. That was a hundred and forty-two inch wheelbase. That's about as long a car as ever built, and twice on the hill I had to back up to make the turns. I'd hit 'em so fast that I'd have to stop. We started from Rincon I think, from the bottom of the grade. From Rincon to the top, to the Hotel, the Palomar Hotel, Bailey's Hotel. We went up the old … Nate [Harrison] grade, and here was two or three turns that were so short that we couldn't make 'em going at the speed I was going. And one of them, Percy Benbough was right he thought -- he was the promoter of the deal so he wanted to ride with it. So he rode on the running board. He got kind scared on one of the turns and unloaded and I had to stop and wait for him to catch up with me. That was the time I made the record. I couldn't tell you, what time I made from Rincon to Bailey's, … I don't know whether it was on the record or not. As far as I know it's never been beaten. I don't think they ever went – we had some good cars in there -- we had a Stutz Bearcat -- driven by I had the name of – his father was president of the bank on Fifth and – no, no. Sefton was the B Street – Irwin, Bill Irwin he had a Stutz Bearcat. I beat him by about fifteen minutes I think. He had some boy drive it for him. The time was thirty-five minutes from Rincon to Bailey's Resort on top of the mountain in a Stevens-Duryea, seven passenger car, hundred and forty-two inch wheelbase. It wasn't stripped down. It was a standard touring car. And we were a'running against, well you might say, racing cars. I don't remember (how much power) in those days they had different … horsepower than what they do now. It was about a fifty horsepower. A large six cylinder engine.

The San Diego Evening Tribune ran this item on September 28, 1912 [36]:

> STEVENS-DURYEA IN LEAD FOR TROPHY
>
> Holds Record for Palomar Grade Climb Although Many Other Machines Have Attempted to Reduce the Time
>
> With the record of thirty-five minues up Palomar grade the Stevens-Duryea appears to have a strangle hold on the Benbough trophies as the contest will be closed Monday. So far as is known no other motor car which has been sent up the grade has made time which will compare with the thirty-five minutes set by the Stevens-Duryea. This car was really the first machine to make fast time up the grade. It is owned by F.W. Jackson. Several months ago this car set the time at thirty-nine minutes and its performance led to the

inauguration of a contest up the hill with the Benbough trophies being offered. On another trial the same car went up in forty-eight minutes but its last performance cuts that time thirteen minutes. With Dave Campbell at the wheel and the other seat occupied by Percy Benbough, the donor of the trophies and George and Roy Cambell and Herman Ruether occupying seats in the tonneau, the Stevens-Duryea was sent over the grade in thirty-five minutes last Saturday. For more than twelve miles the big car plugged away steadily and not once did it boil water. Great chances were taken by the passengers for the Stevens-Duryea, with its extremely long wheelbase, was sent around the curves at rates of speed faster than was conductive of safety. For the run the car was equipped with Diamond tires and much of its success resulted from the good service these tires gave. Had a tire left the rim or had a blowout been encountered in any of the many dangerous places the car with its passengers would have taken a sheer drop of several hundred feet. The Stevens-Duryea was lubricated with Monogram oil, examination of the lubrication system at the trip's end showing that the perfect lubrication furnished by Monogram oil also helped to make such a fast time possible.

**This Stevens-Duryea auto won the 1912 Palomar race.
David C. Campbell is behind the steering wheel with a dog in his lap.
After the Palomar race, this car was stripped down from stock
and then raced in the October 1912 San Diego to Phoenix race which it won.
This photo is after its victory in the San Diego to Phoenix race, with David C. Campbell
behind the wheel and mechanic E.B. Harvey alongside** [41,42]

The San Diego Union ran this item on October 1, 1912 [38]:

STEVENS-DURYEA IS WINNER AT PALOMAR

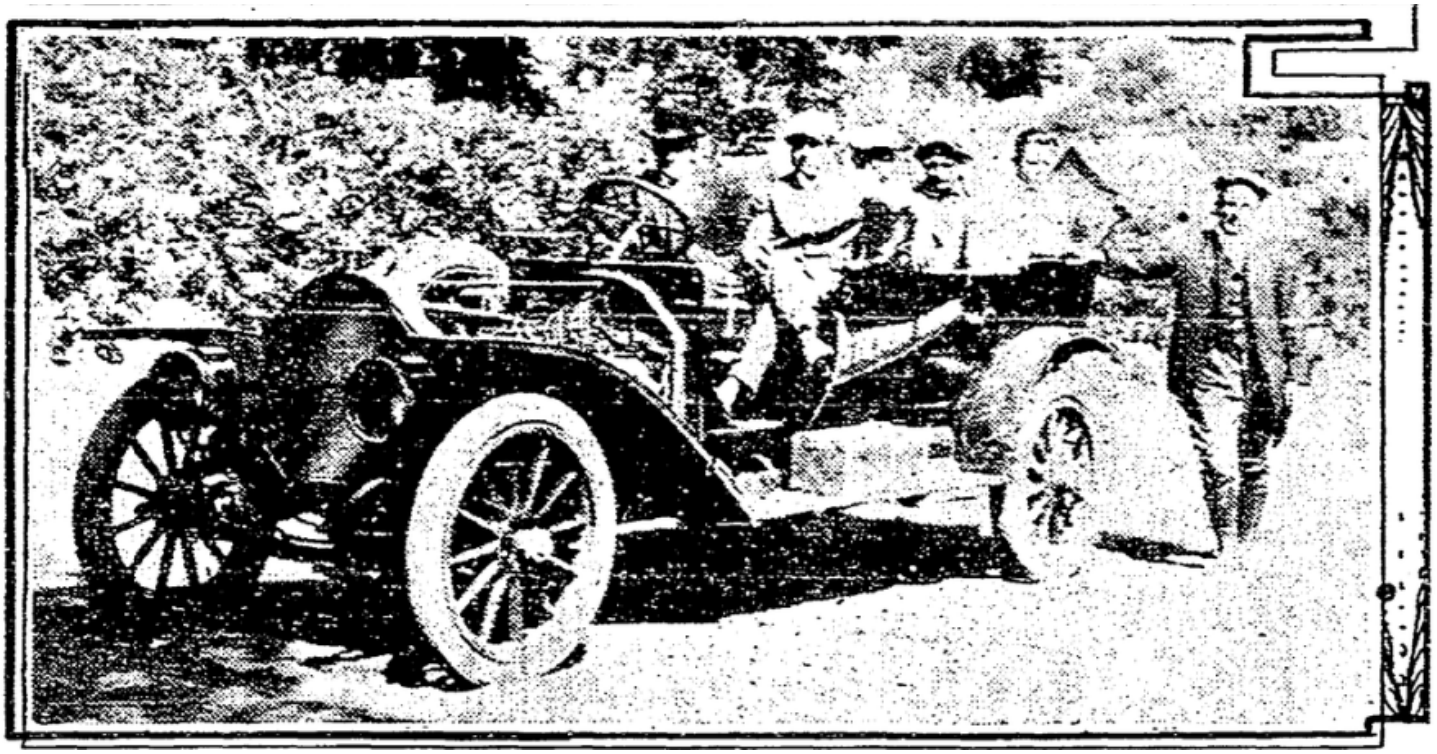
Benbough Trophies Will Be Awarded to Dave Cambell; Time is 35 Minutes

Without dispute the Stevens-Duryea holds the Palomar mountain record, the contest for the handsome trophies donated by Percy Benbough being closed yesterday without any automobile having lowered the time of thirty-five minutes made by the Stevens-Duryea driven by Dave Campbell, of the Campbell Machine company, which has the local agency for that car. This time is considered remarkable by those familiar with the steep grade and the condition of the roadway at this time. After O.A. Walling in a Schacht car had driven the grade in thirty-nine minutes Sunday he took another whirl at it yesterday but was forced to abandon the trip when the Schacht developed engine trouble.

The Stevens-Duryea was driven to the grade yesterday and would have been sent up had the Schacht lowered its record but as the Schacht failed the Stevens-Duryea carried off the honors without another trial. Both the silver trophy and the gold medal, set with a diamond, offered by Benbough, will be given to Campbell. While many drivers talked about going after the record made by the Stevens-Duryea only few attempted to do so, the Schacht making the best bid. Other cars which were in the contest made the run as follows: Metz, 45 minutes; Ford, 55 minutes; Franklin, 45 minutes, and Reo, 50 minutes.

The winning car is owned by F.W. Jackson, vice-president of the First National bank. Mr. Jackson has driven the car several thousand miles. After the fast run up the grade the machine was in good condition and at no time during the hard climb did it show signs of overheating. Considering that the Stevens-Duryea has a 142-inch wheelbase, the longest in the world, great credit is due Campbell for negotiating the sharp curves at such great speed without accident.

The San Diego Evening Tribune ran this story on October 5, 1912 [39]:



HANDSOME TROPHIES GO TO DRIVER OF CAR WINNING PALOMAR GRADE CLIMB

Photograph of Stevens-Duryea at top of Palomar after its victorious run. …

Dave Campbell, Who Piloted Big Stevens-Duryea Owned by F.W. Jackson, Will Get Cup and Diamond Medal

All of the honors that are bestowed on a victorious driver in an automobile contest have come to Dave Campbell of the Campbell Machine company, who, at the wheel of F.W. Jackson's Stevens-Duryea, piloted that car to victory in the Palomar mountain climb. The time of 35 minutes was hung up by the Stevens-Duryea, this time being four minutes better than that set by its nearest competitor. With the handsome trophies offered by the Benbough Cleaning company at stake, these being a gold medal with diamond setting, and a handsome silver loving cup, the time contest up Palomar aroused more interest than any previous motor event ever given in San Diego. Motorists of San Diego are praising the sportsmanlike conduct of Percy Benbough in offering the trophies and not requiring any entrance fee.

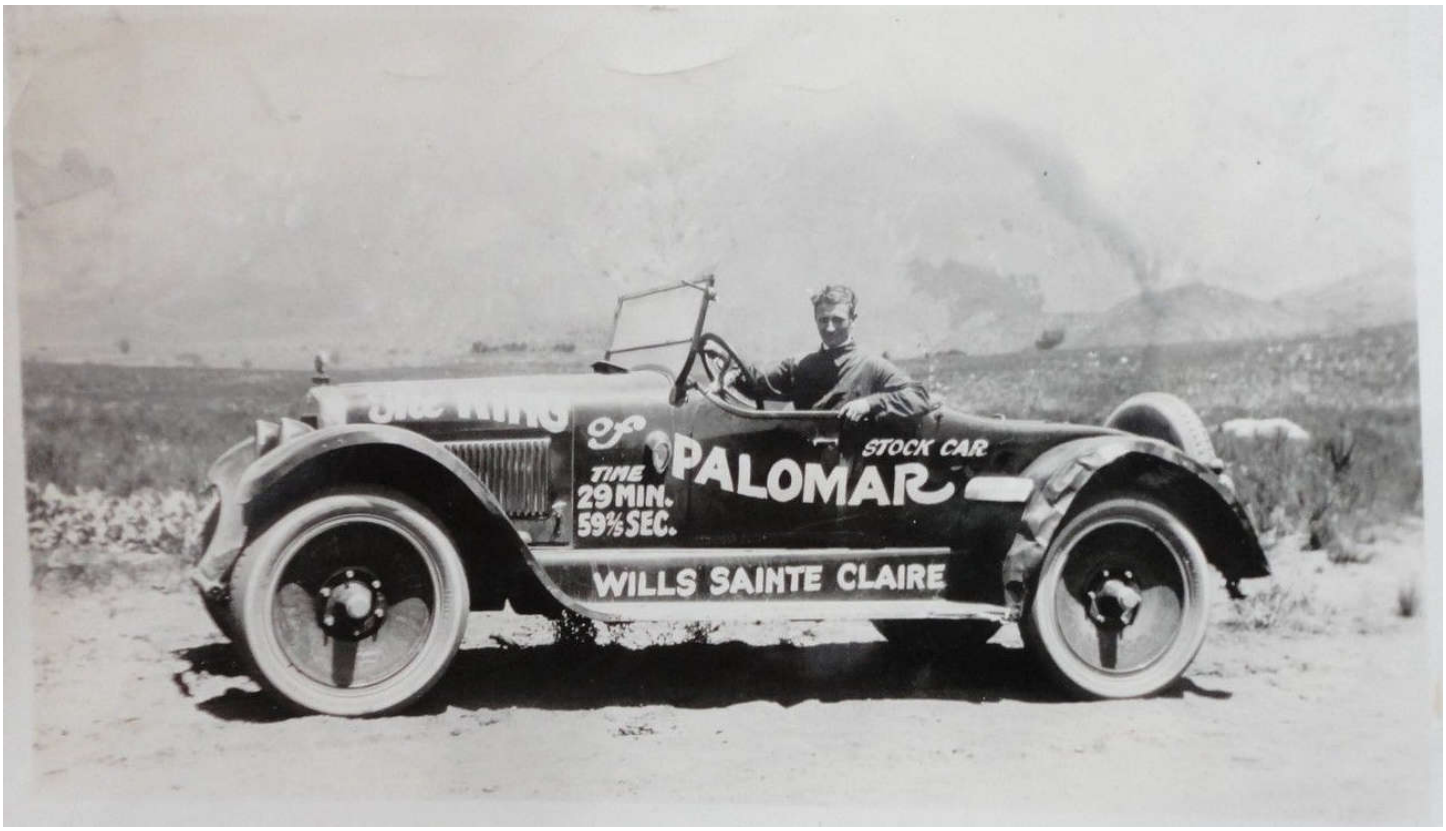
The only condition regarding entrance in the race was that the drivers check out at the Benbough Cleaning company's store on Fifth street. The trophies which have been on exhibition in that company's store window for the last two months have been admired by every San Diego motorist and more

would have put up a fight for them had they not feared the dangers of driving a car at great speed up the heavy Palomar grade. The trophies have been engraved with Campbell's name slso with the name of Jackson, who owns the car. They will be turned over to Campbell Monday.

Racing up the Nate Harrison Grade continued in following years. The San Diego Evening Tribune ran this story on July 8, 1922 [43]:

WILLS BEST ON STEEP PALOMAR

Fighting its way up the mountain, digging in feverishly for a toe hold here, scrambling frantically from the edge of a precipice there, dodging trees, rounding hairpin turns at breakneck speed, with death the penalty for one false move or the slightest hesitation on the part of the driver – valiantly strove the Wills Sainte Claire on its record-breaking race against time up Palomar mountain, last Thursday afternoon. Never before in the history of Palomar mountain has there been such perfect co-ordination between car and driver. Never before has a motor car performed so wonderfully. Conditions were met and conquered that would chill the blood of the ordinary driver and break the back of a less sturdy machine. The road was badly cut up, owning to trails made by another machine earlier in the day, and the loose dirt formation on the turns so closely resembled sand that it took a heart of iron and a nerve of steel to negotiate the curves at high speed under such adverse conditions. The latest record was established by a Wills Sainte Claire, stock roadster, and the time was 29 minutes 59 2-5 seconds, which is nearly two minutes better than the best previous time. The car was purchased by H.F. Morgan from the Powell Motor Car company about five months ago and it was the amazing performance and endurance qualities of this machine that prompted Morgan to purchase the Wills Sainte Claire agency from the Powell Motor company a short time ago.



According to a statement made by Morgan previous to the record breaking run, the roadster which has been named the "King of Palomar", previous to its initiation into the racing game had covered 10,381 miles between San Diego and the Santa Fe Springs oil territory, where Morgan has large holdings, over all sorts of roads and never been into a garage for repairs previous to its attempt at Palomar mountain. This is the same car which a short time ago pulled a 20-passenger G.M.C. bus over Torrey Pines grade under the additional handicap of having to stop five times on account of traffic congestion. "There are thoroughbreds and thoroughbreds," to quote Morgan, "but it is not often that you meet a high spirited thoroughbred like the Wills Sainte Claire – one that can stand the excruciating punishment of heavy labor that only trucks of the plow horse variety are called upon to perform – and not break down under the strain." Palomar mountain at this time of the year is beautiful. While the grade is steep and 12 ½ miles long the top of the mountain, like everything else worth while in this world is well worth the effort, when once attained. At one place on the mountain, on a clear day, it is possible to view Los Angeles, San Pedro, and the Catalina Islands. The Pacific ocean is easily seen from a number of places and Sentenac canyon also comes into sight. The weather at all times, at this stage is ideal: warm, balmy, sunshiny days and cool fragrant, invigorating nights.

A more complete history of hillclimb racing up Nate Harrison Grade is covered in *Racing up Palomar Mountain* [28].

References

1= Palomar from Tepee to Telescope. Catharine M. Wood. archive.org/details/wood_20230829
2= Fink, W. C., Creator. Collection # TMS FINW. Title: Smith Mountain – Palomar. Undated, circa 1937. San Diego History Center Library
3= San Diego County Survey Records System srs.sandiegocounty.gov
4= Escondido Times, 18 September 1890, page 1, column 3
5= San Diego Union, 11 September 1891, page 2, column 1
6= San Diego Union, 8 June 1891, page 2, column 1
7= Escondido Times, 30 July 1891, page 3, column 5
8= San Diego Union, 27 August 1891, page 5, column 1
9= San Diego Union, 6 January 1892, page 5, column 4
10= San Diego Weekly Union, 1 October 1896, page 5, column 2
11= National City Record, July 28, 1892, page 6, column 2
12= Escondido Times, 27 April 1893, volume 7, number 26, page 1, column 1
13= Withington, Constance Restarick, Creator. Collection # TMS WITC Withington, Constance Restarick. Title: Reminiscences by Constance Restarick Withington, 1885-1902. pp. 6-11. San Diego History Center Library
14= Richmond Goodwin oral history. San Diego History Center. Oral History Program. Collection #OH Goodwin, Richmond. Interviewer, Hastings, Edgar. 21 September 1960. Pages 12-13
15= San Diegan-Sun, January 3, 1894, page 4, column 3
16= Evening Tribune (San Diego), 7 August 1897, page 3, column 2; San Diego Union, 7 August 1897, page 7, column 1; San Diego Union, 12 August 1897, page 5, column 7
17= San Diego Weekly Union, 1 October 1896, page 5, column 2
18= San Diego Union, September 24, 1933, page 14, column 2
19= San Diego Union, June 23, 1908, page 10, column 3
20= San Diego Herald, April 2, 1859, page 2, column 3
21= An Illustrated History of Southern California. Chicago: Lewis Publishing Company, 1890. Also in: History of San Diego County. Carl H. Heilbron, editor. San Diego Press Club, San Diego, 1936
22= Archaeological Investigations at Molpa, San Diego County, California. D.L. True, C.W. Meighan, Harvey Crew. University of California Publications in Anthropology, Volume 11. Berkeley, Calif.: University of California Press, 1974. Page 71
23= Robert Asher. My Palomar. archive.org/details/asher-my-palomar_202402
24= San Diego Union, June 17, 1876, page 3, column 2
25= Township No. 10 South, Range No. 2 East, San Bernardino Meridian. San Francisco: Surveyor General's Office, November 17, 1880
26= Township No. 9 South, Range No. 1 East, San Bernardino Meridian. San Francisco: Surveyor General's Office, December 13, 1884
27= Official map of San Diego County, California: compiled from latest official maps of U.S. surveys, railroad and irrigation surveys, county records, and other reliable sources. Published in 1890 but the map data predates that by perhaps a year. Thomas Dykes Beasley, 1890
28= Racing up Palomar Mountain. Peter Brueggeman. archive.org/details/hillclimb_20231116
29= San Diego Union, November 25, 1896, page 8, column 1
30= San Diego History Center Archives
31= An Interview with David C. Campbell, June 26, 1959. Edgar F. Hastings. San Diego History Center
32= San Diego Evening Tribune, July 6, 1912, page 6, column 1
33= An Interview with William G. Halbritter, 1880-1972, October 9, 1967. Jerry MacMullen and C.A. McKenzie. San Diego History Center
34= San Diego Union, July 21, 1912, page 43, column 2
35= San Diego Evening Tribune, September 21, 1912, page 13, column 1
36= San Diego Evening Tribune, September 28, 1912, page 6, column 1
37= San Diego Union, September 29, 1912, page 44, column 1
38= San Diego Union, October 1, 1912, page 7, column 1
39= San Diego Evening Tribune, October 5, 1912, page 6, column 2
40= San Diego Union, October 6, 1912, page 22, column 2
41= South Bay Historical Society Bulletin, Number 24, October 2019, pp. 25-26
42= Richard W. Crawford. San Diego Yesterday. Charleston, SC: The History Press, 2013
43= San Diego Evening Tribune, July 8, 1922, page 19, column 4
44= San Diego Union, January 20, 1892, page 2, column 1
45= Escondido Times, June 14, 1894, page 3, column 5
46= San Diego Weekly Union, September 10, 1896, page 6, column 3
47= San Diego Weekly Union, September 24, 1896, page 8, column 4
48= The Wrangler (San Diego Corral of The Westeners) 28(3):1-7, 1995
49= San Diego Union, January 7, 1897, page 5, column 2
50= San Diego Evening Sun, January 22, 1897, page 5, column 3
51= San Diego Weekly Union, March 18, 1897, page 8, column 5
52= Los Angeles Herald, June 8, 1897, page 7, column 4
53= San Diego Weekly Union, August 12, 1897, page 2, column 2
54= San Diego Union, September 7, 1899, page 6, column 3
55= Box 1 (Series 1, Personal Correspondence). Gustavus C. Doane Papers, 1860-1939. Collection 2211. Merrill G. Burlingame Special Collections, Montana State University Library, Bozeman, Montana
56= San Diego Weekly Union, January 18, 1900, page 4, column 5
57= San Diego Union, May 3, 1900, page 6, column 1
58= San Diego Weekly Union, June 28, 1900, page 13, column 4
59= San Diego Weekly Union, July 12, 1900, page 5, column 2
60= San Diego Union, April 21, 1901, page 8, column 1
61= San Diego Evening Tribune, July 8, 1902, page 5, column 4
62= San Diego Weekly Union, September 10, 1903, page 6, column 3
63= San Diego Evening Tribune, June 21, 1900, page 3, column 1
64= Los Angeles Herald, July 11, 1892, page 3, column 1
65= San Diego Union, July 1, 1903, page 6, column 5
66= San Diego Union, August 6, 1903, page 2, column 4
67= San Diego Evening Tribune, August 6, 1903, page 6, column 1

68= San Diego Weekly Union, December 13, 1906, page 5, column 6
69= Escondido Times, May 4, 1906, page 1, column 3
70= San Diego Sun, March 22, 1913, page 8, column 2
71= Oceanside Blade, August 9, 1913, page 1, column 2
72= San Diego Union, July 13, 1913, page 5, column 2
73= San Diego Sun, August 1, 1914, page 7, column 1
74= Oakland Tribune, May 31, 1914, page 37, column 5
75= San Diego Sun, December 31, 1915, page 8, column 8
76= Fred Blum interview on December 10 and 21, 1964. Frances Beven Ryan Papers. Escondido Public Library, Pioneer Room
77= San Diego History Center Collection: OH Bailey, Adalind S. Interviewer: Hastings, Edgar F. Date: May 14, June 2, 1959
78= Hotel Palomar on Palomar Mountain. Peter Brueggeman archive.org/details/smith-douglass-hotel_20230913
79= San Diego Union, 16 January 1903, page 3, column 4
80= Palomar and the Stars. Edward Davis, 1947. archive.org/details/davis-palomar-stars_20230205
81= Palomar Mountain brochures. Peter Brueggeman. archive.org/details/brochures_202401
82= Palomar Mountain, Images of America. Brad Bailey. Charleston, SC: Arcadia Publishing, 2009
83= San Diego Evening Tribune, June 7, 1904, page 6, column 1
84= San Diego Evening Tribune, May 25, 1901, page 2, column 3. This May 1901 newspaper note says “T.O. Bailey will again run his stage between Palomar Mountain and Escondido twice a week.” Use of the word “again” implies he was running a stage the preceding 1900 season.
85= San Diego Union, January 1, 1900, page 18, column 6
86= The Record (National City), August 2, 1900, page 6, column 3
87= San Diego Weekly Union, May 5, 1921, page 8, column 3
88= Escondido Times Advocate, April 19, 1921, page 1, column 1
89= San Diego Union, July 9, 1921, page 1, column 1
90= San Diego Union, June 27, 1921, page 1, column 1
91= San Diego Union, May 4, 1921, page 5, column 2
92= Los Angeles Herald, July 30,1901, page 8, column 2
93= Escondido Times, June 30, 1905, page 2, column 1
94= Escondido Times, June 9, 1905, page 5, column 2
95= Touring Topics 12(7):16-18,36, July 1920
96= San Diego Union, July 10, 1921, page 9, column 3
97= San Diego Union, June 17, 1921, page 6, column 1
98= San Diego Union, July 3, 1921, page 14, column 4
99= San Diego Union, May 21, 1922, page 37, column 2
100= San Diego Union, August 16, 1924, page 15, column 3
101= Oceanside Blade, June 17, 1926, page 1, column 7
102= San Diego Evening Tribune, June 26, 1926, page 21, column 2
103= Los Angeles Times, July 10, 1927, page 101, column 4
104= Escondido Weekly Times Advocate, June 23, 1911, page 2, column 1
105= Los Angeles Times, March 17, 1927, page 9, column 1
106= San Diego Evening Tribune, September 29, 1933, page 19, column 2
107= Gordon Stuart on Palomar Mountain. Peter Brueggeman. archive.org/details/gordon-stuart_202308
108= San Diego Union, July 9, 1935, page 9, column 2; San Diego Union, July 10, 1935, page 3, column 5
109= San Diego Union, November 26, 1940, page 7, column 3
110= San Diego Union, December 18, 1940, page 30, column 6
111= San Diego Union, July 28, 1948, page 1, column 4 and page 2, column 2
112= Escondido Times, June 29, 1893, page 1, column 8
113= Los Angeles Daily Times, August 3, 1911, section 2, page 5
114= Escondido Times-Advocate, October 7, 1950, page 6, column 4
115= Fallbrook Enterprise, June 14, 1912, page 3, column 4
116= San Diego Union, August 17, 1912, page 11, column 1
117= San Diego Union, July 30, 1912, page 17, column 1
118= Tribune-Sun (San Diego), December 9, 1940, page 1, column 1 & page 4, column 6
119= Tribune-Sun (San Diego), December 11, 1940, page 1, column 2
120= Tribune-Sun (San Diego), January 14, 1941, page 5, column 3
121= Tribune-Sun (San Diego), January 27, 1941, page 19, column 3
122= San Diego Union, February 25, 1941, page 17, column 6
123= Tribune-Sun (San Diego), May 27, 1941, page 13, column 4
124= San Diego Union, November 8, 1942, page 14, column 1
125= San Diego Union, September 7, 1947, page 8, column 2
126= San Diego Union, September 9, 1947, page 4, column 4
127= Fallbrook Enterprise, July 1, 1949, page 9, column 4
128= Tribune-Sun (San Diego), September 21, 1949, page 4, column 5
129= Escondido Daily Times-Advocate, May 25, 1953, page 1, column 8
130= Escondido Daily Times-Advocate, July 16, 1953, page 5, column 5
131= San Diego Union, August 11, 1913, page 11, column 2
132= San Diego Union, October 5, 1916, page 6, column 1
133= San Diego Weekly Union, December 12, 1918, page 8, column 3
134= San Diego Union, June 26, 1919, page 8, column 4
135= San Diego Union, May 28, 1922, page 30, column 6
136= Evening Tribune (San Diego), May 12, 1923, page 26, column 1
137= San Diego Union, July 8, 1923, page 5, column 1
138= San Diego Union, July 15, 1923, page 55, column 7
139= San Diego Union, September 5, 1924, page 5, column 6
140= Evening Tribune (San Diego), September 11, 1924, page 6, column 2
141= San Diego Union, November 13, 1930, page 1, column 4
142= San Diego Union, November 18, 1934, page 18, column 2
143= San Diego Union, December 13, 1900, page 8, column 3
144= San Diego Union, October 4, 1891, page 3, column 1

145= San Diego Union, August 13, 1890, page 8, column 2
146= San Diego Union, June 5, 1890, page 6, columns 1 and 2; San Diego Union, June 9, 1890, page 8, column 4; San Diego Weekly Union San Diego Weekly Union, January 29, 1891, page 2, column 1; San Diego Weekly Union, May 21, 1891, page 5, column 5; San Diego Union, June 9, 1891, page 2, column 2; San Diego Weekly Union, March 24, 1892, page 8, column 1
147= San Diego Union, September 2, 1890, page 8, column 4
148= San Diego Weekly Union, March 9, 1899, page 7, column 4
149= San Diego Union, July 28, 1899, page 8, column 4
150= Evening Tribune (San Diego), October 9, 1899, page 7, column 3
151= San Diego Weekly Union, August 23, 1900, page 2, column 4
152= Evening Tribune (San Diego), May 25, 1901, page 2, column 3
153= San Diego Union, June 12, 1901, page 5, column 5
154= San Diego Union, August 11, 1908, page 6, column 2
155= Evening Tribune (San Diego), September 12, 1910, page 6, column 2
156= Coast Dispatch and The Progress (Encinitas), October 21, 1937, page 6, column 5
157= Times-Advocate (Escondido), February 11, 1938, page 6, column 5
158= Times-Advocate (Escondido), September 28, 1934, page 7, column 2
159= San Diego Sun, October 9, 1937, page 3, column 2
160= Daily Times-Advocate (Escondido), October 11, 1948, page 1, column 2
161= San Diego Sun, July 6, 1929, page 15 and 16
162= Coast Dispatch (Encinitas), July 19, 1934, page 8, column 4
163= Daily Times-Advocate (Escondido), January 21, 1935, page 1, column 2
164= Daily Times-Advocate (Escondido), February 7, 1938, page 2, column 2
165= Weekly Times-Advocate (Escondido), October 15, 1948, page 7, column 4
166= Los Angeles Herald, May 20, 1894, page 3, column 6
167= San Diego Union, October 21, 1895, page 2, column 4
168= Escondido Times, December 14, 1893, page 3, column 3
169= San Diego Union, April 7, 1894, page 8, column 1
170= Oceanside Blade, November 18, 1922, page 4, column 3
171= San Diego Union, October 29, 1922, page 11, column 2
172= Daily Times-Advocate (Escondido), July 31, 1923, page 1, column 3
173= Daily Times-Advocate (Escondido), August 18, 1923, page 1, column 5
174= Daily Times-Advocate (Escondido), August 14, 1924, page 4, column 3
175= Daily Times-Advocate (Escondido), November 25, 1925, page 1, column 1
176= Oceanside Blade, March 10, 1927, page 2, column 2
177= Daily Times-Advocate (Escondido), May 3, 1927, page 1, column 4
178= Calexico Chronicle, September 4, 1929, page 2, column 1
179= Daily Blade-Tribune (Oceanside), February 3, 1930, page 1, column 6
180= Daily Times-Advocate (Escondido), February 3, 1933, page 4, column 5
181= Daily Times-Advocate (Escondido), June 2, 1936, page 1, column 2
182= Daily Times-Advocate (Escondido), July 3, 1936, page 10, column 5
183= Times-Advocate (Escondido), July 17, 1936, page 6, column 2
184= Times-Advocate (Escondido), January 20, 1919, page 1, column 3
185= Daily Times-Advocate (Escondido), October 4, 1918, page 4, column 2
186= 1903 memoir of Robert Haley Asher. Robert Haley Asher. archive.org/details/1903_20240118
187= San Diego Union, July 27, 1913, page 24, column 1
188= San Diego Weekly Union, August 6, 1896, page 2, column 7
189= Daily Times-Advocate (Escondido), November 28, 1917, page 4, column 3
190= Daily Times-Advocate (Escondido), May 17, 1918, page 3, column 4
191= Daily Times-Advocate (Escondido), February 15, 1916, page 4, column 2
192= Daily Times-Advocate (Escondido), February 24, 1916, page 2, column 2
193= Daily Times-Advocate (Escondido), March 2, 1916, page 2, column 3
194= Daily Times-Advocate (Escondido), March 8, 1916, page 3, column 2
195= Daily Times-Advocate (Escondido), March 23, 1916, page 4, column 2
196= Daily Times-Advocate (Escondido), March 29, 1916, page 2, column 3
197= Weekly Times-Advocate (Escondido), April 7, 1916, page 5, column 3
198= Daily Times-Advocate (Escondido), June 22, 1916, page 3, column 4
199= Weekly Times-Advocate (Escondido), July 28, 1916, page 5, column 3
200= Weekly Times-Advocate (Escondido), March 9, 1917, page 8, column 1
201= Daily Times-Advocate (Escondido), May 24, 1919, page 2, column 3
202= Daily Times-Advocate (Escondido), June 18, 1919, page 2, column 2
203= Daily Times-Advocate (Escondido), April 12, 1921, page 2, column 2
204= The Sun (San Diego), January 8, 1885, page 4, column 3
205= National City Record, August 20, 1885, page 4, column 2
206= The San Diegan-Sun, April 22, 1893, page 1, column 4
207=The Record (National City), August 23, 1900, page 6, column 4
208= The San Diegan-Sun, November 11, 1901, page 5, column 3